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TOWARD THE NEXT GENERATION OF FARM POLICY

HEARINGS

BEFORE THE

JOINT ECONOMIC COMMITTEE

AND THE

SUBCOMMITTEE ON
AGRICULTURE AND TRANSPORTATION

OF THE

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TOWARD THE NEXT GENERATION OF FARM POLICY

TUESDAY, JUNE 14, 1983

Congress of the United States,
Joint Economic Committee,
Washington, D.C.

The committee met, pursuant to notice, at 10:10 a.m., in room SD-124, Dirksen Senate Office Building, Hon. Roger W. Jepsen (chairman of the committee) presiding.

Present: Senator Jepsen and Representative Holt.

Also present: Robert J. Tosterud, professional staff member.

OPENING STATEMENT OF SENATOR JEPSEN, CHAIRMAN

Senator **Jepsen**. The hearing will come to order.

The subject of today's hearing is agricultural trade policy. Our witnesses today are: Daniel Amstutz, Under Secretary for International Affairs and Commodity Programs, Department of Agriculture; Robert Lighthizer, Deputy U.S. Trade Representative, Office of U.S. Trade Representative; and Allen Wallis, Under Secretary for Economic Affairs of the Department of State.

Ken Farrell of Resources for the Future appeared before this committee last week and characterized future agricultural policy as a "triangle of interests." I agree with Mr. Farrell's contention that future agricultural policies must be developed within a framework that explicitly recognizes both the mutual supportive characteristics as well as the inherent conflicts within the three dimensions of agricultural policy—that's farm policy, food policy, and foreign policy. The challenge before the Congress is to accommodate this triangle of interests within a 1985 farm bill.

Gentlemen, I must be perfectly frank. We have failed the American farmer. Our farm, food and foreign policies have not served to reflect the innovativeness, the productivity, or the sacrifice of the American farmer in the international marketplace. Particularly counterproductive and not only to farmers, but to the entire economy, have been the past turf battles between your agencies. I call upon your strong leadership to discard and to avoid these myopic remnants of the past and combine and coordinate the talents and influence in the pursuit of a revitalized U.S. trade sector. I've said it before and I'll say it again—as a result of policy failures, U.S. agriculture is quickly being turned from a silk purse into a sow's ear.

Within the span of but one generation, U.S. farmers have turned this country from a net importer of agricultural goods to the largest and most powerful food producer the world has known. In fact, for the first time in the history of mankind, a country stands ready to produce and deliver food in proportion to the needs of the world's hungry. If we will only let it.

The fact that this country is idling over 80 million acres of the most productive land on the face of the Earth is tremendously regretful and borders on a crime against humanity and shamefully reflects past and current public policy ineptness.

America's agriculture is as much an obligation as it is an opportunity. It's as much a blessing as it is a business and a techonological phenomenon. Future world history books will call attention to the fact that the most food-productive land on Earth was placed in the stewardship of the most capable, enterprising and innovative individuals. And judgments will be made relative to our potential and actual contribution to the betterment of the human race.

The challenge and responsibility before the Congress and the administration at this point in our history is to create a political and economic environment which will permit our agricultural resource to achieve its greatest potential. It's time to implement a new era of agricultural policy—one which combines farm and food policy with an ambitious, aggressive, international policy which has as its foundation the most powerful partnership—the unmatched productivity of the American farmer and the economic strength and ingenuity of our representative government.

The witnesses before us today can be instrumental in achieving this goal. Each of you is a key person in your own area. Collectively, you represent whether the new day, along with the new direction we're experiencing in Washington, will truly exist in the working together for the total overall good, not only of our balance of trade payments, but of the vitality and the financial health of the agricultural community in this country.

I want to remind our National Public Radio audience that they can participate in these hearings by sending their views on future farm policy to the Joint Economic Committee, Washington, D.C. 20510. That's the Joint Economic Committee, Washington, D.C. 20510.

At this point, we will place the written opening statements of Representative Hamilton, vice chairman of the Committee, and Senator Abdnor in the hearing record.

[The opening statements follow:]

OPENING STATEMENT OF HON. LEE H. HAMILTON

U.S. dominance in world markets soared during the 1970s. This rapid increase was due to a combination of factors, including: general economic prosperity, a relatively weak dollar, expansion of credit to developing countries, crop failures abroad, and a willingness of producers to bring acreage into production that had been idle during the 1950s and 1960s. In a relatively short period, prosperity in the U.S. farm sector came to depend on exports. In 1981, two-fifths of U.S. acreage was exported as compared to one-fifth in 1969 and one-eighth in 1949. Farm exports are a major determinant of U.S. farm income, accounting for 29 cents out of every dollar earned by U.S. Furthermore, more than 630,000 people are employed in the processing, assembly, and distribution of agricultural exports. In 1983, $43.8 billion of farm exports generated over $88 billion in total U.S. business activity.

Projections for 1983 show farm exports at $36.5 billion, down 17 percent from the 1981 peak of $43.8 billion. Two major reasons for the downturn in U.S. farm exports are the global recession, which has served to dampen demand abroad, and the overvalued dollar which has made U.S. exports relatively less competitive. This has made U.S. exports more vulnerable to the unfair trade practices of our competitors.

Our two most important overseas customers for agricultural exports are the European Community and Japan. Yet, it is in these two markets that we face the most serious trade problems. With the European Community we face market access problems and export subsidy competition, and with Japan we face problems of market access. Both have been unwilling to make substantial concessions in the face of continued negotiations. Even the recent U.S. export of wheatflour to Egypt has failed to bring concessions out of the Europeans. Meanwhile U.S. farmers have been the pawns of American foreign policy. In spite of the recent Administration endorsement of a long-term grain agreement with the Soviet Union, the grain embargo enforced the preception of the U.S. as an unreliable supplier and forced them to look elsewhere, reducing the size of that market for U.S. farmers.

The U.S. has always relied on its vast, unparalleled, agricultural resources to maintain its competitiveness internationally. That is no longer sufficient. The U.S. must have a coherent, well-thought-out strategy to ensure that U.S. farm incomes do not continue to decline, to ensure that other countries do not impede U.S. market access or use unfair competition in third country markets, and to ensure that the U.S. continues to be viewed as a reliable supplier. The Administration officials we have here today are leading figures in the development and implementation of agricultural trade policy. I look forward to having the opportunity to hear from them.

OPENING STATEMENT OF HON. JAMES ABDNOR

WELCOME, GENTLEMEN. I'M VERY ANXIOUS TO HEAR YOUR AGENCIES' VIEWS ON AGRICULTURAL TRADE POLICY. FEW ISSUES CAUSE MORE DEBATE, CONFUSION AND FRUSTRATION.

I'M PARTICULARLY INTERESTED IN DISCOVERING FROM YOU GENTLEMEN WHETHER, IN FACT, THIS COUNTRY HAS WHAT MAY BE EVEN LOOSELY TERMED AN AGRICULTURAL TRADE POLICY. IT WOULDN'T SURPRISE ME TO LEARN THAT U.S. FARMERS ARE MORE FAMILIAR WITH THE AGRICULTURAL TRADE POLICY OF THE EUROPEAN ECONOMIC COMMUNITY THAN THEY ARE WITH THE AGRICULTURAL TRADE POLICY OF THEIR OWN COUNTRY. THIS IS PARTICULARLY TRAGIC IN THAT, IN MY JUDGEMENT, NEVER IN OUR HISTORY HAVE U.S. FARMERS NEEDED MORE THE STRONG AND CONTINUING INTERNATIONAL SUPPORT OF THEIR REPRESENTATIVE GOVERNMENT.

GIVEN THE EXTREME DEPENDENCE OF U.S. AGRICULTURE ON GLOBAL ECONOMIC AND POLITICAL EVENTS AND THE INABILITY OF FARMERS TO INFLUENCE THOSE EVENTS, IT SHOULD NOT SURPRISE THIS CONGRESS OR THIS ADMINISTRATION OR THE PUBLIC THAT AMERICAN FARMERS ARE LOOKING TO THEIR GOVERNMENT FOR AT LEAST A PARTIAL SOLUTION TO THEIR ECONOMIC PROBLEMS. AND I DON'T KNOW OF ONE FARMER WHO WANTS TO LOOK TO THE DEPARTMENT OF THE TREASURY. RATHER, THEY'RE LOOKING TO YOUR AGENCIES, THE DEPARTMENT OF AGRICULTURE, THE OFFICE OF THE TRADE REPRESENTATIVE AND THE DEPARTMENT OF STATE. YOUR DIRECT, ACTIVE, INNOVATIVE AND CONTINUING SUPPORT OF U.S. AGRICULTURE IS ESSENTIAL IF THIS CRITICAL INDUSTRY AND NATIONAL ASSET IS TO ACHIEVE ITS FULL ECONOMIC PROMISE.

Senator **Jepsen**. Gentlemen, I would advise you before you begin your testimony that your prepared statements will be entered into the record in full, so that you may use that information as you so desire. Hopefully, in the interest of time, and to enable us to really have an exchange of ideas and questions, you will be able to summarize.

If not, we'll understand.

Mr. Amstutz, we'll start with you. Welcome, and you may proceed as you wish.

STATEMENT OF DANIEL G. AMSTUTZ, UNDER SECRETARY, INTERNATIONAL AFFAIRS AND COMMODITY PROGRAMS, DEPARTMENT OF AGRICULTURE

Mr. **Amstutz**. Thank you, Mr. Chairman. I am pleased to have this opportunity to discuss policies affecting agricultural trade with you.

The close relationship between domestic farm policy, foreign policy, and U.S. agricultural trade has become increasingly apparent and of growing importance in recent years, as you have suggested, Mr. Chairman.

The sharp drop in U.S. agricultural exports since 1981 has made this eminently clear. It also has pointed up sharply how heavily U.S. agriculture has come to depend upon exports as a source of income and growth.

Exports, once representing about one-tenth of U.S. farmers' marketing returns, now account for fully one-fourth, and farmers depend on foreign markets as an outlet for one-third of their harvested cropland.

Our agricultural system is geared to export, and exports are down sharply after 10 years of dramatic growth that reached a record $43.8 billion in fiscal year 1981. They dropped to $39.1 billion last year. If our current forecast holds, they will slip by 9 percent to about $35.5 billion in the current year.

The primary causes of the decline in farm exports are well known: large world supplies, a strong dollar, global recession, lagging demand, competitor trade practices, and the monetary and debt problems which are particularly painful for developing countries.

These conditions affect other industries as well as agriculture. But there are additional factors that bear on agriculture and that relate to the subject of this hearing today. They are the lack of workable rules in international agricultural trade and the impact of U.S. domestic farm programs on the U.S. position in a highly competitive market.

These and the other factors I have cited must be addressed if U.S. agriculture is to regain the export mementum of the past—global economics, trading rules, and the structure of U.S. farm programs.

The global economy will eventually turn around. International cooperation to promote a sound and sustained recovery was pledged by the participants at the Williamsburg Summit.

However, it will take more than renewed buying power in foreign markets for U.S. agriculture to realize its full potential.

Weak demand and record or near-record world crop production over the past 2 years triggered intense competition in the world market. This has resulted in widespread and growing use of export subsidies in world markets and rising protectionist sentiment in domestic markets.

These conditions not only contributed to the drop in U.S. agricultural exports, but they have reduced the U.S. presence in foreign markets.

A prime example in the Middle East, where subsidized exports of poultry from the European Community and Brazil have virtually driven U.S. poultry from that market. The European Community is subsidizing the export of all its major agricultural commodities—grains, sugar, beef, poultry, dairy, and of processed products as well.

This has encouraged other competing countries to do the same. Brazil, Canada, and Argentina are using extra measures to put their products into the world markets. The primary vehicle is export subsidies, but they also use grain board prices set below market levels, export credits, and subsidized interest rates on credit.

The United States has acted to meet this competition in a manner consistent with its policy of liberal trade. We have more than doubled the funds available for commercial export credit guarantees. We have implemented a program of blended export credit. And we have sharpened and boosted funding for our market development activities.

We are making maximum use of Public Law 280, the long-standing Food-for-Peace program. Public Law 480 funding this year totals $1½ billion, $100 million more than for shipments last year, and we made an aggressive and successful effort to speed up the signing of agreements with importing countries. More agreements were signed in the first quarter of the fiscal year than at any time in the last decade.

Blended credit has been an outstanding success. It combines direct credit, offered interest-free by the Commodity Credit Corporation, with CCC commercial credit guarantees to produce a lower interest rate for farm product exports.

Since it was announced, blended credit has been approved to finance the sale of more than 7 million tons of U.S. wheat, corn, rice, soybeans, cotton, and other products. Only a lack of funds for commercial credit guarantees prevents further sales under this program.

Credit and stepped-up market work helped to stop U.S. losses in a slack and predatory export market. But when demand returns, genuine, sustainable export growth will require a trading system in which market forces, not Government actions are the primary influence on the movement of commodities.

The temptation in agriculture is great and understandable, to fight subsidy with subsidy, to meet foreign distortions of trade with distortion of our own.

But U.S. agriculture, with its tremendous productive capacity and a comparative advantage in the production of most commodities, would be the long-term loser in such a confrontation.

The 1970's, in which the market largely took over from governments in alloting trade, showed the potential for U.S. agriculture in a relatively open trading climate. World trade in grains during the period rose by almost 100 million tons and U.S. farmers supplied three-fourths of the increase.

To reach its export potential, U.S. agriculture needs a trading system in which comparative advantage is allowed to work. For us to try to enhance farm income with marketing boards or to share markets within a cartel or to join the subsidy game would be to deny our producers the opportunity for full export growth as recovery comes followed by rising demand.

Our No. 1 priority in trade policy must be to continue to adhere to the principles of free trade and to work until those principles are embodied in the rules for international agricultural trade.

Within that priority, the most immediate task is to bring under control the use of export subsidies.

USDA analysts estimate that subsidies of the European Community alone have cost the United States $5 to $6 billion a year in exports since 1980. If conditions don't change, the loss could be up to $8 billion in 1987.

We will meet with the Community in Brussells next week to continue discussions begun last year to address the trade issues that divide us. The concerns of both sides on several issues have been spelled out and discussed and I'm sure it is clear to them that export subsidies remain our top priority.

Elsewhere in trade policy, we are pressing Japan for improved market access on a number of agricultural products, particularly beef and citrus. Japan has taken steps to liberalize access for some products in which we are interested, but they are far short of what we believe to be necessary. Talks on these issues are continuing.

Next to achieving liberalized trade, the most important export challenge is to get the most from the two markets with the greatest potential for import growth—China and the Soviet Union.

The embargo on export sales to the Soviet Union beyond 8 million tons of grain, which was imposed in 1980 for foreign policy reasons, was drastic and is proving to be a long-term setback for U.S. farm exports.

The year before the embargo, the United States supplied 70 percent of Soviet grain import requirements. That has dropped to an estimated 20 percent this year—and this is a market that almost doubled to more than 40 million tons last year.

Beyond the loss in the Soviet market, the embargo seriously eroded confidence in the reliability of the United States as a supplier, not only in the Soviet Union, but among other importers as well. This was a confidence that agriculture had been working to restore since it was first shaken by the soybean embargo of 1973 and again by government interruptions of grain exports later in the decade.

President Reagan took the major step to open the Soviet market fully to U.S. producers when he lifted the embargo in April of 1981. To restore confidence in the United States as a supplier, President Reagan issued a statement on farm export policy on March 22, 1982. In it, he pledged that:

No restrictions will be imposed on the export of farm products because of rising domestic prices;

That farm exports will not be used as an instrument of foreign policy, except in extreme situations and then only as a part of a broader program;

And the United States will continue to pursue the objective of a world agricultural market freed of trade barriers and unfair trade practices.

Earlier this year, the President signed the contract sanctity legislation passed by the Congress as further assurance of reliable supplies.

In April, he authorized the negotiation of a new long term grain agreement, and these negotiations are currently underway.

The road back in that market will be difficult, but with a new agreement, the way will be open.

China, with its billion consumers, has been growing as a market for us since the government and trade contracts were started more than a decade ago. The resumption of full diplomatic relations in 1979 led to stepped-up market development activities by the U.S. Government and the U.S. trade.

Market development work in China has been spearheaded by the U.S. Feed Grains Council, the American Soybean Association, and the U.S. Wheat Associates. They are nonprofit U.S. commodity organizations that work with the Department of Agriculture's Foreign Agricultural Service to develop foreign markets for their own commodities.

There are more than 50 of these market development cooperators, representing as many categories of products, working overseas on a shared-cost basis with the FAS. They have projects underway in more than 70 countries, including China.

I mention this because they apply expertise drawn from all segments of their business—from production, to processing, to marketing, to promote the use of U.S. farm products in foreign markets.

The work and results of these groups demonstrate the great and largely untapped potential of organized participation by the U.S. private sector in export expansion.

The cooperator work in China has been effective. Our exports there have grown from $350 million in 1978 to $1.8 billion last year. Right now, the impasses over textile quotas is troublesome for our export trade with China. But we are hopeful that further negotiations will result in a satisfactory solution.

In focusing on foreign markets and trade, there is a tendency to overlook the impact of our own domestic farm programs on exports. However, the approach to domestic farm policy is basic to the course of export trade and this has been amply demonstrated in the recent past.

The Secretary discussed in detail the changes in domestic policies that occurred during the expansionary export period that started in the 1970's—the introduction of target prices, increased minimum support rates, farmer-owned reserves insulated from the market, and other measures that seemed appropriate for the time.

However, there were no provisions for adjustment in response to a falling market and the subsequent slump in world demand and drop in market prices have left the United States with farm support prices above market-clearing levels.

Senator **Jepsen**. Excuse me, Mr. Amstutz. I just want to explain. I am going to leave to make a vote. This morning we have some stacked. But please proceed and we'll continue with these. I think this series of votes will be over by the time we get to the question period.

Mr. **Amstutz**. Fine, Mr. Chairman.

Senator **Jepsen**. Please know that it's not disrespectful; it's just necessary.

Mr. **Amstutz**. I understand, sir. This has cost us our ability to compete effectively in the world market.

To add to the injury, the higher U.S. support levels provide an incentive for competing countries to produce more. This is so because world price floors are heavily influenced by the price support level in the United States, which is a major producer and the leading exporter of most farm commodities.

When U.S. supports are above the market level, competitors can establish a price just below the U.S. level and enjoy a price bonus in the prevailing market.

The appreciation of the dollar has enhanced this advantage. Australian and Canadian wheat producers currently enjoy an effective 15 to 20 percent increase in export prices as a combined result of the increase in U.S. price support loans and the rise in the value of the dollar over the past 12 months.

So it should be no surprise that our competitors have not acted to curtail production in the face of world grain stocks at record levels and that the U.S. grain exports have slumped.

With these few examples, I have tried to show that agricultural trade is dependent on a combination of policies, both foreign and domestic. Foreign policy measures can impact adversely on agricultural trade, as in the case of the Soviet embargo. And they can impact positively, as occurred with the initial development in improvement of relationship with China.

Domestic farm programs developed and implemented without regard to their trade effects, will, in the long run, hurt farm income by impeding exports, the key to full growth for the U.S. farm economy.

And finally, a world system of liberal agricultural trade in which producers compete on the basis of comparative advantange offers the best way to solid, sustainable, long-term growth in U.S. agricultural exports.

That concludes may statement.

Mr. **Tosterud**. Thank you, Mr. Amstutz.

[The prepared statement of Mr. Amstutz follows:]

PREPARED STATEMENT OF DANIEL G. AMSTUTZ

Mr. Chairman, members of the Committee, I am pleased to have the opportunity to discuss policies affecting agricultural trade with you.

The close relationship between domestic farm policy, foreign policy, and U.S. agricultural trade has become increasingly apparent and of growing importance in recent years.

The sharp drop in U S. agricultural exports since 1981 has made this eminently clear. It also has pointed up sharply how heavily U.S. agriculture has come to depend on exports as a source of income and growth. In the boom years of the 1970s and into the eighties, U.S. agricultural exports nearly tripled in volume and went up six times in value. U.S. farmers put 55 million more cropland acres into production in response to what seemed to be an endless increase in world demand.

Exports, once representing about one-tenth of U.S. farmers' marketing returns, now account for fully one-fourth, and farmers depend on foreign markets as an outlet for one-third of their harvested cropland.

Our agricultural system is geared to export, and exports are down sharply after 10 years of dramatic growth that reached a record $43.8 billion in fiscal year 1981. They dropped to $39.1 billion last year, and if our current forecast holds, they will slip by 9 percent to about $35.5 billion in the current year.

Secretary Block discussed the impact of the recent past on the farm economy with the Committee last month -- farm prices low, farm income down, and government costs for farm support programs tripled in two years.

Clearly, for U.S. agriculture to prosper, it must export. This Administration intends for agriculture to prosper, so we intend for agriculture to export.

The primary causes of the decline in farm exports are well known-- large world supplies, a strong dollar, global recession, lagging demand, competitor trade practices, and the monetary and debt problems that have ensued, which are particularly painful for developing countries.

These conditions affect other industries as well as agriculture, but there are additional factors that bear on agriculture and that relate to the subject of this hearing today. They are the lack of workable rules in international agricultural trade and the impact of U.S. domestic farm programs on the U.S. position in a highly competitive market.

These and the other factors I have cited must be addressed if U.S. agriculture is to regain the export momentum of the past — global economics, trading rules, and the structure of U.S. farm programs.

The global economy will eventually turn around. International cooperation to promote a sound and sustained recovery was pledged by the participants at the Williamsburg Summit.

However, it will take more than renewed buying power in foreign markets for U.S. agriculture to realize its full potential.

Weak demand and record or near-record world crop production over the past two years triggered intense competition in the world market. This has resulted in widespread and growing use of export subsidies in world markets and rising protectionist sentiment in domestic markets, our own included.

These conditions not only contributed to the drop in U.S. agricultural exports, but they have reduced the U.S. presence in foreign markets.

A prime example is the Middle East, where subsidized exports of chickens from the European Community and Brazil have virtually driven U.S. poultry from that market. Grain subsidies have hurt us in traditional markets around the world.

The European Community is subsidizing the export of all its major agricultural commodities — grains, sugar, beef, poultry, and dairy, and of processed products as well.

This has encouraged other competing countries to do the same. Besides Brazil, Canada and Argentina are using extra measures to put their products into the world market. These include export subsidies, grain board prices set below market levels, export credits, and subsidized interest rates on credit.

The United States has acted to meet this competition in a manner consistent with its policy of liberal trade. We have more than doubled the funds available for commercial export credit guarantees, we have implemented a program of blended export credit, and we have sharpened and boosted funding for our market development activities.

We are making maximum use of Public Law 480, the long-standing Food for Peace Program. P.L. 480 funding this year totals $1.5 billion, $100 million more than for shipments last year, and we made an aggressive and successful effort to speed up the signing of agreements with importing countries. More agreements were signed in the first quarter of the fiscal year than any first quarter in the last decade.

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The temptation in agriculture is great, and understandable, to fight subsidy with subsidy, to meet foreign distortions of trade with distortions of our own.

But U.S. agriculture, with its tremendous productive capacity and a comparative advantage in the production of most commodities, would be the long-term loser in such a confrontation.

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To reach its export potential, U.S. agriculture needs a trading system in which comparative advantage is allowed to work.

For us to try to enhance farm income with marketing boards, or to share markets within a cartel, or to join the subsidy game in the long term would be to deny our producers the opportunity for full export growth as recovery comes followed by rising demand.

Our Number One priority in trade policy must be to continue to adhere to the principles of free trade and to work until those principles are embodied in the rules for international agricultural trade.

And within that priority, the most immediate task is to bring under control the use of export subsidies. This can't wait for the time-consuming processes of the multilateral trade rounds of the past.

USDA analysts estimate that subsidies of the European Community alone have cost the United States $5 billion to $6 billion a year in exports since 1980. If conditions don't change, the loss could be up to $8 billion by 1987.

We will meet with the Community ~~here next week~~ in Brussels to continue discussions begun last year to address the trade issues that divide us. The concerns of both sides on several issues have been spelled out and discussed, and I am sure that it is clear to them that export subsidies remain our top priority.

Elsewhere in trade policy, we are pressing Japan for improved market access on a number of agricultural products, particularly beef and citrus. Japan has taken steps to liberalize access for some products in which we are interested, but they are far short of what we believe to be necessary. Talks on these issues are continuing.

Next to achieving liberalized trade, the most important export challenge is to get the most from the two markets with the greatest potential for import growth — China and the Soviet Union.

The embargo on export sales to the Soviet Union, which was imposed in 1980 for foreign policy reasons, was drastic and is proving to be a long-term setback for U.S. farm exports.

The year before the embargo, the United States supplied 70 percent of Soviet grain import requirements. That has dropped to an estimated 20 percent this year — and this is a market that almost doubled to more than 40 million tons last year (and has a potential of up to 65 million tons a year.)

Beyond the loss in the Soviet market, the embargo seriously eroded confidence in the reliability of the U.S. as a supplier, not only in the Soviet Union but among other importers as well. This was a confidence that agriculture had been working to restore since it was first shaken by the soybean embargo of 1973 and again by government interruptions of grain exports later in the decade.

President Reagan took the major step to open the Soviet market fully to U.S. producers when he lifted the embargo in April 1981. To restore confidence in the U.S. as a supplier, he issued a statement on farm export policy on March 22, 1982. In it, he pledged that:

—No restrictions will be imposed on the export of farm products because of rising domestic prices;

—Farm exports will not be used as an instrument of foreign policy except in extreme situations and then only as part of a broader embargo;

—And the United States will continue to pursue the objective of a world agricultural market freed of trade barriers and unfair trade practices.

Early this year, he signed the contract sanctity legislation passed by the Congress as further assurance of reliable supplies.

In April, he authorized the negotiation of a new long-term grain agreement, and these negotations are under way.

The road back in that market will be difficult, but with a new agreement, the way will be open.

China, with its billion consumers, has been growing as a market for us since government and trade contacts were started more than a decade ago. The resumption of full diplomatic relations in 1979 led to stepped up market development activities by the U.S. Government and the trade.

Market development work in China has been spearheaded by the U.S. Feed Grains Council, the American Soybean Association, and U.S. Wheat Associates. They are non-profit U.S. commodity organizations that work with the Department of Agriculture's Foreign Agricultural Service to develop foreign markets for their own commodities.

There are more than 50 of these market development cooperators, representing as many categories of products, working overseas on a shared-cost basis with FAS. They have projects under way in more than 70 countries, including China.

I mention this because they apply expertise drawn from all segments of their business -- from production, to processing, to marketing — to promote the use of U.S. farm products in foreign markets.

The work and results of these groups demonstrate the great and largely untapped potential of organized participation by the U. S. private sector in export expansion.

The cooperator work in China has been effective. Our exports there have grown from $350 million in 1978 to $1.8 billion last year.

Right now, the impasse over textile quotas is troublesome for our export trade with China, (which is down this year) but we are hopeful that further negotiations will result in a satisfactory solution.

In focusing on foreign markets and trade, there is a tendency to overlook the impact of our own domestic farm programs on exports. However, the approach to domestic farm policy is basic to the course of export trade, and this has been amply demonstrated in the recent past.

The Secretary discussed in detail the changes in domestic policies that occurred during the expansionary export period that started in the 1970s — the introduction of target prices, increased minimum support rates, farmer-owned reserves insulated from the market,and other measures that seemed appropriate for the time.

However, these were no provisions for adjustment in response to a falling market, and the subsequent slump in world demand and drop in market prices have left the United States with farm support prices above market-clearing levels. This has cost us our ability to compete effectively in the world market.

To add to the injury, the higher U.S. support levels provide an incentive for competing countries to produce more. This is so because world price floors are heavily influenced by the price support level in the United States, which is a major producer and the leading exporter of most basic farm commodities.

When U.S. supports are above the market level, competitors can establish a price just below the U.S. rate and enjoy a price bonus in the prevailing market.

The appreciation of the dollar has enhanced this advantage. Australian and Canadian wheat producers, for example, currently enjoy an effective 15 to 20 percent increase in export prices as a combined result of the 11 percent increase in U.S. price support loans and the rise in the value of the dollar over the past 12 months.

So it should be no surprise that our competitors have not acted to curtail production in the face of world grain stocks at record levels and that U.S. grain exports have slumped.

Mr. Chairman, with these few examples, I have tried to show that agricultural trade is dependent on a combination of policies, both foreign and domestic.

Foreign policy measures can impact adversely on agricultural trade, as in the case of the Soviet embargo, and they can impact positively, as occurred with the improved relationships with China.

Domestic farm programs developed and implemented without regard to their trade effects, will, in the long run, hurt farm income by impeding exports, the key to full growth for the U.S. farm economy.

And finally, a world system of liberal agricultural trade, in which producers compete on the basis of comparative advantage, offers the best way to solid, sustainable, long-term growth in U.S. agricultural exports.

This concludes my statement, Mr. Chairman. I will be glad to respond to questions.

Mr. TOSTERUD. For the record, I'm Bob Tosterud, professional staff member of the Joint Economic Committee.

We'll proceed with Mr. Lighthizer. Please proceed as you wish, sir.

STATEMENT OF HON. ROBERT E. LIGHTHIZER, DEPUTY U.S. TRADE REPRESENTATIVE

Mr. LIGHTHIZER. Your strong leadership, Mr. Chairman, has helped to focus attention on the need to sell more U.S. farm goods abroad. We in the administration commend you for your efforts to promote American agricultural exports and for your work to develop effective and responsible agricultural trade policies.

Since 1970, our strategy has been to give U.S. agricultural policy a market orientation, to expand exports through reciprocal reductions in trade barriers and through promotion programs, and to defend U.S. export interests through bilateral and multilateral negotiations against the unfair trade practices of others.

With respect to the latter point, Ambassador Brock is committed to a free and fair trade policy. We have used the GATT system and have worked to refine it in an effort to achieve fair trade. Frankly, our efforts have not been very successful. The GATT dispute settlement process has its weaknesses. However, we are committed to the process itself. But when the process is stalled because one of the countries involved won't accept the findings made in accordance with the rules and procedures which all parties have agreed to, then we should be prepared to take unilateral action.

Considering what our policy should be in the future, I think it must be to retain a market orientation and to aggressively pursue the removal of distortions to trade in agriculture.

Thank you.

Mr. TOSTERUD. Thank you very much, Mr. Lighthizer.

[The prepared statement of Mr. Lighthizer follows:]

PREPARED STATEMENT OF HON. ROBERT E. LIGHTHIZER

I. INTRODUCTION

My name is Robert E. Lighthizer. I am the Deputy United States Trade Representative and have responsibility for agricultural trade policy. I am pleased to join you this morning to discuss the future of farm policy and the role of agricultural trade policy in particular.

Your strong leadership, Mr. Chairman, has helped to focus attention on the need to sell more U.S. farm goods on the world market. I commend you for your efforts to promote American agricultural exports, and for your work to develop effective and responsible agricultural trade policies.

Since 1970, our strategy has been to give U.S. agricultural policy a market orientation, to expand exports through reciprocal reductions in trade barriers and through promotion programs, and to defend U.S. export interests through bi- and multi-lateral negotiations against the unfair trade practices of others.

I believe this is a strategy that has worked well in expanding our exports. U.S. agricultural exports account for about one-fifth of total exports and last year added a net of $24 billion to our balance of trade. Production from one out of every four acres harvested in the U.S. is exported. In recent years, the U.S. has exported two-thirds of the wheat produced in this country, one-half of our soybean output, and one-third of the feed grain crop. Over the past 10 years U.S. agricultural exports have surged -- this is a tribute to U.S. farmers' competitiveness and productivity.

The question now before your Committee is what should U.S. agricultural trade policy be in the future and how should it mesh with domestic farm policy as well as overall U.S. economic and foreign policy. To paraphrase Santayana, "One who cannot remember the past is condemned to repeat it." With that thought in mind, it might be useful to review our domestic agricultural and trade policy in the 1970s and now, as we think about the future.

II. INCREASED MARKET ORIENTATION

Enactment of the Agricultural Act of 1970 began the redirection of U.S. agricultural policy to a market orientation. Quota restrictions on crop acreage were replaced with authorization for the Secretary of Agriculture to institute a set-aside program. Under this, if the Secretary determines that supplies are in excess, eligibility for Government loans, payments, or purchases could be made contingent on a producer's putting a specified percent of normally planted acreage into conserving uses.

The Agriculture and Consumer Protection Act of 1973 strengthened the market orientation of our farm policy. When Congress began to consider legislation to replace the Agricultural Act of 1970, the agricultural situation was far different than it had been in the past. World market prices had begun to rise above domestic prices. Consumer food prices were also rising, and stocks were at low levels. Growth in foreign demand led to increased purchases of U.S. goods.

With passage of the 1973 Act, Congress moved farm programs considerably further in the direction of less Government intervention and greater reliance on the market. As world market prices increased above U.S. support levels, American farm exports became more competitive on the world market. The last year the United States paid to subsidize agricultural exports was 1973.

Most importantly, the new law adopted a system of providing deficiency payments to farmers if prices fell below target prices, which were representative of production costs. This replaced an income-supplement program.

While exports continued to increase throughout the late 1970s, stock levels increased. This caused farm prices to fall which led to farmers calling for an increase in support levels. During consideration of the Food and Agriculture Act of 1977, higher target prices and loan levels were adopted to provide relief from falling commodity prices coupled with increased costs of production. A major innovation was the creation of the farmer-held grain reserve as a tool to stabilize extreme market price swings. The Secretary of Agriculture can open the reserve in times of low prices and attract farm commodities to it by offering a higher than normal loan rate. Alternatively, supplies can be released onto the market only when the Secretary announces that the release level has been achieved.

The Agriculture and Food Act of 1981 continued similar policies and mandated further increases in target prices. As world prices fell and stocks grew, the Secretary of Agriculture utilized his authority to pay farmers to divert land in addition to that set-aside from the 1983 crop. Agricultural policy mixed strong incentives to production with supply management features.

III. EXPORT EXPANSION EFFORTS

From 1969, through 1981, the value of U.S. farm exports expanded annually. A number of events in the early 1970s contributed to the tremendous growth in world trade in agricultural products, and U.S. farm exports in particular. Import demand rose sharply as a result of economic growth, the devaluation of the dollar, the emergence of the Soviet Union and China as new customers, and the fact that world grain production declined in two years (1972/73 and 1974/75) due largely to bad weather. U.S. farmers responded to resulting higher commodity prices by increasing production. The value of U.S. exports rose from $5.8 billion in fiscal year 1969 to a high of $43.8 billion in 1981.

A number of changes in agricultural trade policy in the 1970s helped to reduce barriers to trade and promote exports. The Trade Act of 1974 authorized the Executive Branch to enter into negotiations with other trading partners to reduce tariff barriers to trade, strengthened U.S. laws providing relief to domestic industries injured by foreign imports, and mandated a procedure under which the unfair foreign trade practices of other nations could be countered. Other legislation strengthened the Department of Agriculture's cooperative export promotion programs which provide information on U.S. farm products and connect potential buyers with suppliers, created agricultural trade offices in a number of foreign countries, and granted China most-favored-nation status. Government agricultural export credit assistance programs shifted from providing direct credit to credit guarantees. Last fall, a 3-year blended credit program was announced for $1.5 billion. The purpose of this program is to meet subsidized competition.

In 1979, multilateral efforts were completed to reciprocally reduce trade barriers in the Tokyo Round (1973-1979) of Multilateral Trade Negotiations under the General Agreement on Tariffs and Trade (GATT). Nations agreed to tariff reductions as well as a number of actions to reduce non-tariff barriers. One of the major developments was the Subsidies Code, formally known as the Agreement on Interpretation and Application of Articles VI, XVI, and XXIII. Under Article XVI of the GATT, export subsidies on non-primary products are prohibited and export subsidies on primary products are not to result in a country's gaining an inequitable share of the world market of the subsidized commodity. The Subsidies Code provides additional guidelines for the use of export subsidies and procedures to resolve disputes over their use. For example, export subsidies on primary products are not to result in price undercutting or threaten to cause serious prejudice to a competitor's product. The Code became effective in 1980, and the United States has been the most vigorious employer of the Code's procedures for conciliation and dispute settlement. Since the Code's inception, the United States has initiated 14 actions under it, 5 of which involved agricultural products.

We have also been holding bilateral consultations with our trading partners to discuss their barriers to our farm exports. Our discussions with the Japanese are an example of this. Over the past one and a half years, we have pressed the Japanese to provide U.S. agricultural products the same access in their markets as we provide in the United States for Japanese products. While Japan is our largest single country market for agricultural exports, it is our belief that Japanese import restrictions on 19 categories of agricultural items are not consistent with GATT rules. Our intention is to continue consultations on a bilateral basis and formalize discussion of some items under GATT procedures. Our highest priority is to have the Japanese eliminate their import restrictions on U.S. exports of beef and citrus. The current agreement covering trade in beef and citrus expires

March 31, 1984. Bilateral consultations on these items will continue.

IV. U.S. DEFENSE OF EXPORT INTERESTS

The use of export subsidies by other governments to gain market shares has been an item of some discussion over the past year as the U.S. level of farm exports fell and U.S. goods were displaced in some markets by subsidized ones. In fiscal year 1982, the value of U.S. agricultural exports fell 10 percent, the first decline in thirteen years. Since such sales represent a large portion of domestic production, the decline had a significant impact on U.S. and world commodity prices and farm income.

While the decline in the value of farm exports in 1982 and further decline anticipated this year are cause for concern, it can be explained by the strength of the dollar, weak demand, the world recession, and the effect of the grain embargo as well as other nations' use of protectionist trade policies and export subsidies. Though exports are typically a small percent of world production, they are often a significant proportion of an exporter's production. Therefore, a decline in demand for food products can have a devastating effect on world prices and the exporter. As the residual supplier and supply adjuster for many exported commodities, the United States bears the impact of demand and price declines more heavily than any other producer.

In response to the current situation, the Administration has acted in a number of areas. A blended credit program was developed to meet subsidized competition. An export payment-in-kind (PIK) sale of wheat flour to Egypt was made to regain a market we had lost to subsidized exports from the European Community (EC). We have actively participated in bilateral and multilateral meetings aimed at increasing the discipline on the use of export subsidies in agricultural trade. And, we have filed 5 agricultural cases under the Subsidies Code and 4 under other GATT articles. We are now pursuing more cases in the dispute settlement procedures of GATT than any previous Administration.

We have actively used the GATT dispute settlement process because we believed it provided us the best way to remove distortions to agricultural trade. To be candid, it is not working the way we would have liked. In two cases, the non-binding recommendations of the panels' reports have been forwarded to the Subsidies Code Committee. This Committee can adopt, ignore, or reject these recommendations.

With regard to the first case, the wheat flour case, the U.S. has argued that the panel failed to address the fundamental legal issue before it -- whether or not the EC's use of export subsidies violated international rules. In last week's Committee meeting, it continued to be apparent that it, too, is unwilling thus far to address this issue and to define the concept, more than "an equitable share of world trade."

Similarly, the Committee seems unwilling to use the conclusions in the pasta report as a basis for recommending that the EC eliminate its export subsidies on pasta. While the Committee has only considered this report at one meeting, also last week, it has not yet recommended the adoption of the report as we would like nor made any recommendations in accordance with its findings.

While only 2 of the cases undergoing dispute settlement have reached Committee consideration, our experience so far has not been encouraging. I would like to take a moment to review our pending cases and provide more detail about the wheat flour and pasta cases.

We challenged the EC's use of export subsidies on wheat flour arguing that the EC gained more than an equitable share of the world trade in wheat flour in violation of GATT Article XVI:3. The panel created under the dispute settlement procedure released its report in February to the parties involved. The report found that the EC's share of the world wheat flour trade increased considerably while the share of the United States and others decreased. The report stated it would be desirable for the EC to make greater efforts to limit their use of such export subsidies, but did not make a legal determination regarding the EC's use of the subsidies as a violation of international rules. Specifically, no determination was made as to whether the EC had obtained more than an equitable share of world trade.

When the report was released, Ambassador Brock criticized the panel for its unwillingness and inability to deal forcefully with our complaint. We strongly believe that the panel's report refuses to make the legal conclusions dictated by the facts agreed on in the case and leaves the major legal issue unresolved.

Progress has also been made in the pasta case. Here we have alleged that EC export subsidies on pasta products violate Article 9 of the Subsidies Code because the subsidies are on non-primary products, and secondly violates Article 8 of the Code since the subsidies threaten serious prejudice to U.S. pasta manufacturers by displacing them in their home markets. The EC contends that the subsidy is related to cereal prices rather than the processed product. On April 19, the panel released its report and in a 3 to 1 decision found that the EC's pasta subsidies are inconsistent with Code provisions. The panel's report was submitted to the Subsidies Code Committee on May 19; recommendations must be made to the parties involved within 30 days. The Committee most recently considered this report on June 9.

A number of other cases are progressing. In our poultry case, it is alleged that the EC export subsidy on whole chickens has violated Article 10 of the Subsidies Code in that the subsidy has allowed them to gain an inequitable share of world trade, has displaced U.S. exports of chickens, and materially undercut U.S. prices in the Middle East market. It is also alleged that Article 8 of the Code is violated in that these export subsidies threaten serious prejudice to U.S. producers since the EC system causes uncertainty in the world poultry market and displaces similar U.S. products in third country markets. While we have held consultations with the EC on this issue, information on Brazilian subsidies on poultry exports became available and informal consultations were held with them last August and again on March 1. Formal consultations under Code Article 12 were held on April 1. We have invited Brazil to join us for trilateral consultations with the EC during a meeting on June 23rd.

On May 26, USTR accepted a petition alleging that certain practices of Brazil, Portugal, and Spain have harmed our trade in soybean oil and meal. We have requested consultations with Brazil under the Subsidies Code, and with Spain and Portugal under GATT Article XXII.

Finally, I would like to touch on two other cases of interest, those concerning citrus and canned fruit and raisins. The citrus case has to do with the preferential EC import duties on citrus fruits and juice from particular Mediterranean countries and the adverse effect of this on U.S. exports. A panel is in the process of being formed.

In the canned fruit and raisins case, we are alleging that EC production subsidies on canned peaches, canned pears, and raisins have displaced U.S. exports of these products to the EC and that negotiated tariff concessions from the EC have been made ineffective due to the subsidies. The panel has been writing its report, but due to one member's illness, it has not yet been completed. I should also note that a case regarding EC trade practices on sugar is pending.

In addition to utilizing the dispute settlement procedure, since December we have been holding monthly high-level meetings with the Europeans to try to reach some agreement on agricultural policies. The next meeting will be held in late June.

Other attempts to bring more discipline to agricultural trade are being made in the new GATT Committee on Trade in Agriculture. This Committee was established last November at the GATT Ministerial meeting. At a meeting of this group tomorrow, participating countries will submit a list of their programs that act as export subsidies or restrictions on imports. Following this, the Committee will examine trade measures affecting access and supply, and the operation of the GATT as it concerns export subsidies.

Finally, our strong interest in reducing trade distortions was most recently expressed at the Williamsburg summit. The U.S. is now prepared to work toward a new round of GATT trade negotiations in 1985/86 which would include agriculture.

V. CONCLUSION

I would now like to consider what recent agricultural trade experience means for future U.S. policy. It is anticipated that it will take a few years before economic recovery fully affects our trading partners, and the developing countries in particular. Demand for farm products will probably not pick up to any great extent for at least the next 3-5 years. Developing countries represent our greatest potential growth market. To the extent that they face debt servicing problems, the weakness of demand is exacerbated.

We also anticipate that the EC will continue providing excessive stimulation to its production which will result in it having excess supplies growing at one and one-half percent per year. The U.S. Department of Agriculture estimates that the EC's policies are costing other exporters $9 billion annually in terms of their quantity and price effects. The U.S. share of this is $6 billion.

I would like to suggest the following points with regard to the future of farm policy:

1. Our agricultural trade policy must continue to be one that allows us to pursue free and fair trade. The competitiveness of our farmers demands that we follow a market oriented policy. But, we are and will continue to be willing to be tough and act forcefully to defend ourselves against the unfair trade practices of government intervention on the part of others.

2. We must continue to work for discipline on the use of export subsidies in the GATT and under the Subsidies Code. At this point in time, we are still working to have the recommendations of the panels on wheat flour and pasta do this. Depending on the outcome of these and the other cases, we will know if we are able to utilize the Code to promote fair trade or if refinements in it are needed.

3. We must continue to press other exporting nations to adopt responsible production and export policies so that we do not bear the brunt ourselves of overstimulated production, low world prices, and stockpiling .

4. We must have a flexible domestic farm policy which effectively relates world supply and price to U.S. production incentives or disincentives and farm income. During this period of excess supply and weak demand, we must take additional steps, as should other exporters, to adopt domestic price support levels which accuately reflect this situation.

I hope that my comments have been useful for your deliberations on the future of U.S. farm policy. I will be glad to answer any questions your might have.

Mr. Tosterud. Mr. Wallis, please proceed as you wish.

STATEMENT OF ALLEN WALLIS, UNDER SECRETARY OF STATE FOR ECONOMIC AFFAIRS

Mr. Wallis. First, I want to associate myself and the State Department with the remarks made by Secretary Amstutz and Ambassador Lighthizer and merely to make a few supplementary remarks.

We are entirely in agreement with both what they've said here and what they said in the statements they have submitted. And I might start by explaining briefly the interest of the State Department in agricultural trade.

In the first place, we participate in all efforts to reduce and elimate trade barriers and are particularly concerned about trade barriers to agriculture because that's by far our most important export.

And then, in general, the State Department participates in helping to settle trade disputes and particularly, again, in agriculture, which is where a number of them continue to arise. And finally, the State Department has been able to support the Department of Agriculture's efforts to develop markets abroad. The Secretary has sent several communications to our ambassadors on that subject at different times. Both of the previous speakers reinforced and restated strongly our commitment to an open trading system for all goods and services and our commitment to working within the established rules and institutions to resolve disputes.

But we have to recognize that we've got a long way to go in order to have anything that you could call an open international market in agricultural products. No country has a clean record on agricultural trade, and perhaps more important are the domestic programs which are directed at the agricultural sector. In many countries, these domestic programs lead to over production by setting excessively high support prices. And then in other countries, particularly many of the developing countries, the prices that are set discourage production by setting farm prices at such low levels that they do not cover the cost of production. That's generally done with the idea of keeping down the cost of food in the politically troublesome urban areas.

But whatever the cause, agricultural trade issues are clearly a challenge to U.S. foreign policy.

Let me mention a couple of incidents, anecdotal incidents to be sure, but I think typical, that have impressed me in the short time that I've been in Washington.

Very soon after I was sworn in last September I had the opportunity to meet with Senator Pryor and Mr. Hudson from his State, who is head of a large broiler operation. I think he's the president of a major broiler co-op.

Anyway, with that meeting coming up, I looked into the export market for broilers. And when you look into that, it's perfectly obvious that the foreign producers, especially those in Europe, are using subsidies available to them from their governments to underbid our market almost at will. They can tell what our market will be since it's a free market. They can tell what the bids will have to be.

As another anecdote, just last week in my office, while I was away, we received a call from one of Senator Mattingly's constituents, Mr. Bigley, also a poultry man, but this time in Georgia. He told us that he had been offered boneless chicken breasts landed in Savannah for $1.05 a pound. Mr. Bigley said that his cost of production with no transportation is $1.65. And he also testified that the product he was offered, which was from Brazil, was a very high-quality product.

It's very clear that the subsidies from Brazil are disrupting our trade in broilers, and Mr. Amstutz could expound on that in more detail and greater length than I can. But it has become an important problem for us in the State Department and for international relations.

Now earlier this year, the United States made a subsidized sale of wheat flour to Egypt. Secretary Amstutz is the expert on that case. But as I understand it, and I was involved in it, we blended a commercial sale with a gift from the CCC reserve in such a way as to bring the price level down below the level that was being offered by the Europeans. And that blended price delivered to Egypt was lower for the flour than the actual cost of the wheat used in making that flour, even without allowing for transportation.

So those cases illustrate two things. First, that we must arrange vigorously to improve the rules of the game on agricultural trade. And second, that massive programs of subsidies and countersubsidies lead to wasteful results in terms of the functioning of our economies. But the question, of course, is what we're going to do about it. And Dan Amstutz and Dick Lighthizer have outlined our efforts. I would simply like to add a few points from the perspective of the State Department.

First, it's important to note that our problems in agricultural trade are problems related to Government policies. Without Government interference, our farmers would have no difficulty in selling in any market. But it's only fair to point out that some of our problems place the shoe on the other foot. I'm about to go down to New Zealand and Australia next week, and I'm sure I will hear from them complaints about our import restraint programs for beef and our growing stockpiles of dairy products.

The second point I'd like to emphasize from the State Department's perspective is that the growing importance of agricultural exports to the U.S. economy requires that we pay particular attention to the policies of other governments. Clear trading rules should remove governments from international trading relations. The absence of clear rules means that each dispute in agricultural trade becomes a foreign policy issue between the two relevant governments.

And the third point that I want to bring up is that we need to assure that we deal with these issues in a manner that takes account of our total relationship with the other country. Now that sounds like a special plea for foreign interests, but it's not. Let me give some examples. We have a serious problem with the massive export subsidy program of the European Community, as Secretary Amstutz brought out. But last week I participated in the NATO ministerial meeting in Paris and that brought out forcefully how overwhelmingly important are our security ties with those same countries.

Again, we are determined to eliminate eventually the extensive Japanese system of import quotas, especially for beef and citrus. But we have to keep in mind that Japan is our single largest export market.

And again, we can't condone the Brazilian export subsidy programs which unfairly penetrate not only third markets, but even markets in the United States at times. But we do have an interest in working constructively with Brazil in its development efforts and especially now as it's struggling with very serious debt problems.

Finally, I'd like to comment on a number of letters that were sent to the President just before the Williamsburg Summit meeting. I was the President's personal representative there, which is why these came to my attention. These letters urged that the agenda for that meeting ought to include agricultural trade.

Well, the Williamsburg Declaration makes some very clear statements about trade issues in general. In fact, it may be that in the course of time, the Williamsburg Summit will turn out to have marked a turning point in the tide of protectionism and trade barriers. At least so we hope and so the leaders there hoped.

Agricultural issues were discussed by the leaders and the President made very clear our strong concern about particular problems in agricultural trade. And the summit countries understand very clearly by that the phrase "current trade problems," which is included in the declaration, we intend to give special emphasis to agricultural trade issues.

And just as we'll not eliminate our agricultural programs or our agricultural trade barriers overnight—nor, of course, should we—neither will others. But I can assure you that we are working on them as high priority issues and I believe that we have made some progress and that we are making progress and that we'll make further progress.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Wallis follows:]

PREPARED STATEMENT OF ALLEN WALLIS

INTRODUCTION

I AM PLEASED TO BE HERE TODAY TO DISCUSS AGRICULTURAL TRADE AND EXPORT PROMOTION FROM THE STATE DEPARTMENT PERSPECTIVE. AS WE ALL KNOW, AGRICULTURE IS AN INTEGRAL PART OF THE INTERNATIONAL ECONOMIC SYSTEM. IT CANNOT BE INSULATED FROM THE OTHER PARTS OF THE SYSTEM. FINANCIAL MOVEMENTS, ECONOMIC GROWTH RATES, PRICES OF OTHER COMMODITIES, AND POLITICAL DEVELOPMENTS ALL AFFECT AMERICAN AGRICULTURE TODAY. BY THE SAME TOKEN, OUR AGRICULTURAL RELATIONS WITH OTHER COUNTRIES HAVE BECOME AN IMPORTANT COMPONENT OF OUR OVERALL BILATERAL RELATIONS, WHICH ARE THE CONCERN AND INTEREST OF THE DEPARTMENT OF STATE.

AGRICULTURAL EXPORTS HAVE ASSUMED INCREASING IMPORTANCE RISING IN VALUE FROM $7.3 BILLION IN 1970 TO ALMOST $44 BILLION IN 1981, AND OUR AGRICULTURAL TRADE SURPLUS CLIMBED STEADILY DURING THE 1970'S TO REACH ALMOST $24 BILLION IN FY '82.

IN THE LAST TWO YEARS, HOWEVER, WE HAVE SEEN A DECLINE IN ABSOLUTE TERMS IN THE VALUE OF U.S. AGRICULTURAL EXPORTS WHICH HAVE FALLEN TO AN ESTIMATED $36 BILLION IN 1982/83.

THE DEMAND FOR U.S. AGRICULTURAL EXPORTS HAS BEEN SUBJECT TO MANY OF THE SAME INFLUENCES THAT HAVE CONTRIBUTED TO THE RECENT DROP IN WORLD TRADE -- THE WORLD WIDE RECESSION, A STRONG DOLLAR, HIGH INTEREST RATES, AND THE FINANCIAL CONSTRAINTS OF MANY DEVELOPING AND EASTERN BLOC COUNTRIES. THE DROP IN OUR AGRICULTURAL EXPORTS AFTER MORE THAN A DECADE OF UNINTERRUPTED GROWTH HAS RAISED CONCERNS IN THE GOVERNMENT AS WELL AS THE FARM SECTOR ABOUT THE APPROPRIATE POLICY DIRECTION TO ASSURE A HEALTHY AGRICULTURAL EXPORT SECTOR IN THE FUTURE.

U.S. TRADE POLICY

TRADE POLICY ASSUMES KEY IMPORTANCE IN THIS PRESENT CONTEXT OF OVERSUPPLY AND REDUCED DEMAND. U.S. ADMINISTRATIONS IN THE POST-WORLD WAR II ERA -- INCLUDING THE PRESENT ONE--HAVE CONSISTENTLY BEEN GUIDED BY THE PRINCIPLES OF FREE TRADE. INDEED, FEW DISPUTE THE ECONOMIC BENEFITS OF FREE TRADE. IT IS WIDELY RECOGNIZED THAT IMPORT BARRIERS AND EXPORT SUBSIDIES ARE COSTLY AND COUNTERPRODUCTIVE. ALL THE TEXTBOOKS POINT TO THE SMOOT-HAWLEY TARIFF OF 1930 AND "BEGGAR-THY-NEIGHBOR" SUBSIDIES AS KEY CAUSES OF THE DURATION AND DEPTH OF THE GREAT DEPRESSION. NO ONE WANTS TO REPEAT THAT EXPERIENCE. NOR DO WE WANT TO IMPERIL THE ECONOMIC RECOVERY NOW UNDERWAY BY MOVING TOWARD PROTECTIONISM.

OF COURSE, THE WORLD TRADE SYSTEM HAS NEVER CONFORMED TO THE THEORETICAL MODEL OF "FREE TRADE", NOR DO WE ESPOUSE SUCH AN ABSOLUTIST REGIME. SUBSIDIES, TARIFFS AND NON-TARRIF BARRIERS REMAIN IN FORCE IN ALL COUNTRIES, INCLUDING THE U.S. "FREE TRADE" SHOULD BE OUR GOAL; BUT THERE WILL ALWAYS BE VALID REASONS FOR SOME LIMITED MEASURES OF THIS TYPE. IT IS, HOWEVER, IN THE LONG-TERM INTEREST OF THE UNITED STATES, AND OTHER COUNTRIES, TO MOVE TOWARD A MORE LIBERAL REGIME.

IF WE MAINTAIN A LIBERAL TRADING SYSTEM, WE CAN TAKE ADVANTAGE OF THE OPPORTUNITIES PRESENTED BY ECONOMIC RECOVERY BY KEEPING U.S. MARKETS OPEN AND WORKING FOR A REDUCTION OF TRADE BARRIERS. NATIONS WHICH FIND THEIR EXPORTS BLOCKED BY TARIFFS, QUOTAS OR ARBITRARY TECHNICAL STANDARDS, OR DISPLACED BY SUBSIDIZED EXPORTS, WILL NOT BE ABLE TO EARN THE FOREIGN EXCHANGE TO PAY FOR IMPORTS. WE KNOW THIS IS TRUE IN THE CASE OF U.S. EXPORTS AND THIS IS WHY WE HAVE PLACED SUCH GREAT STRESS ON THE NEED TO WORK TOWARD FREET TRADE IN OUR AGENDA AT THE WILLIAMSBURG SUMMIT. THAT PROTECTIONISM FACED BY THE U.S. IS ALSO A PROBLEM FOR DEVELOPING NATIONS, WHICH OFFER THE GREATEST LONG-TERM POTENTIAL AS MARKETS FOR U.S. PRODUCTS, IF THEY CAN OVERCOME THEIR CURRENT FINANCIAL PROBLEMS AND DEVELOP THEIR ECONOMIES. THE PROBLEM IS THAT IN ALMOST ALL COUNTRIES, UNDERSTANDABLE PRESSURES FOR IMPORT RESTRICTIONS AND EXPORT ASSISTANCE INTENSIFY WHEN ECONOMIC ACTIVITY SLOWS, MAKING A LIBERAL TRADE REGIME HARDEST TO MAINTAIN WHEN IT IS MOST NEEDED.

WHILE WE INTEND TO CONTINUE TO WORK FOR A MORE OPEN WORLD TRADE SYSTEM, WE MUST EMPHASIZE THAT WE ARE PREPARED TO RESPOND TO THE UNFAIR TRADE PRACTICES OF OTHERS. THE ADMINISTRATION'S TRADE POLICY RESTS ON SUPPORT FOR FREE TRADE AND DETERMINED DEFENSE OF U.S. TRADE RIGHTS.

IN KEEPING WITH OUR FUNDAMENTALLY FREE TRADE PHILOSOPHY, OUR PRIMARY STRATEGY FOR REVERSING THE SLUMP IN AGRICULTURAL EXPORTS MUST BE A SUSTAINED AND RESOLUTE EFFORT TO ASSURE THAT U.S. EXPORTS CAN COMPETE FAIRLY IN WORLD MARKETS. THE TRADE PRACTICES OF OTHER NATIONS HAVE AN IMPORTANT INFLUENCE ON THE AGRICULTURAL TRADE ENVIRONMENT, AND IT IS HERE THAT TRADE POLICY OFFICIALS SEEK TO IMPROVE THE OUTLOOK FOR U.S. AGRICULTURAL EXPORTS. IN NO SECTOR ARE THE TEMPTATIONS OF IMPORT BARRIERS AND DUMPING MEASURES GREATER THAN IN AGRICULTURE. MOST NATIONS, INCLUDING THE U.S., SEE AGRICULTURE AS IN MANY WAYS A UNIQUE SECTOR WHICH REQUIRES SPECIAL ATTENTION FOR SOCIAL AND POLITICAL REASONS. THUS, IN DEALING WITH AGRICULTURAL TRADE ISSUES, WE FIND THAT MOST NATIONS ARE EVEN LESS WILLING TO TOLERATE DISLOCATIONS TO THEIR FARM SECTORS THAN TO OTHER SECTORS OF THEIR ECONOMIES. THIS MAKES AGRICULTURAL TRADE ISSUES PARTICULARLY THORNY AND DIFFICULT TO RESOLVE.

U.S. EFFORTS TO IMPROVE AGRICULTURAL TRADE SYSTEM

OUR ON-GOING EFFORTS TO ENSURE A LIBERAL TRADE SYSTEM FOR AGRICULTURE FOCUS ON THREE OBJECTIVES: IMPROVING THE INTERNATIONAL RULES GOVERNING AGRICULTURAL TRADE; INCREASING ACCESS TO RESTRICTED MARKETS (SUCH AS JAPAN); AND LIMITING THE

USE OF EXPORT SUBSIDIES BY OUR COMPETITORS (LARGELY THE EC).

WITH REGARD TO IMPROVING THE RULES, WE ARE SEEKING TO FORGE A CONSENSUS IN MULTILATERAL ORGANIZATIONS, PARTICULARLY THE GATT AND THE OECD, ON THE NEED TO BRING THE RULES FOR AGRICULTURAL TRADE MORE CLOSELY INTO LINE WITH THOSE GOVERNING TRADE IN MANUFACTURES. SUCCESSIVE ROUNDS OF POSTWAR MULTILATERAL TRADE NEGOTIATIONS HAVE ACHIEVED SIGNIFICANT RESULTS IN LIBERALIZING TRADE IN INDUSTRIAL PRODUCTS, AND GENERATING SUBSTANTIAL ADDITIONAL ECONOMIC GROWTH. BUT, CONSIDERABLY LESS HAS BEEN ACCOMPLISHED FOR AGRICULTURAL PRODUCTS.

BECAUSE AGRICULTURE HAS BEEN VIEWED AS A UNIQUE SECTOR, THE INTERNATIONAL TRADING RULES OF THE GATT, WHICH DO NOT ALLOW EXPORT SUBSIDIES ON MANUFACTURED PRODUCTS, DO ALLOW SUCH SUBSIDIES ON PRIMARY AGRICULTURAL PRODUCTS, BUT ONLY AS LONG AS THE SUBSIDIES DO NOT RESULT IN A "GREATER-THAN-EQUITABLE" MARKET SHARE OR IN UNDERCUTTING PRICES. WE HAVE BROUGHT A NUMBER OF CASES TO THE GATT TO TEST OUR INTERPRETATION ON THE GATT RULES ON EXPORT SUBSIDIES. HOWEVER, THE GATT DISPUTE SETTLEMENT PROCESS IS SLOW AND CUMBERSOME, AND IN THE MEANTIME THE EC CONTINUES TO SUBSIDIZE IN WAYS WE CONSIDER DETRIMENTAL TO OUR PRODUCERS' INTERESTS.

Last Fall's GATT Ministerial set up a GATT Committee on Trade in Agriculture, which has begun work on agricultural trade questions. At the same time, studies on the effect of domestic agricultural policies on agricultural trade are underway in the OECD. We hope the work in these international bodies will lead to pressures to reduce the trade-distorting effects of export subsidies.

In addition to our efforts to improve the rules governing agricultural trade, we are also seeking to preserve and improve access for U.S. agricultural exports, particularly to the developed markets of the European Community and Japan. Let us not forget that these two markets are already America's largest. As the accession of Spain and Portugal to the EC approaches, we will need to continue to protect our access rights -- the most important of which are duty-free access of our soybeans and corn gluten feed, which now account for roughly half of our agricultural sales to the Community.

In the case of Japan, our objective is the elimination of the remaining import quotas on 22 agricultural products. In negotiations on the beef and citrus quotas, which were held last October and, informally, this Spring, we have sought to phase out these quotas. Unfortunately, progress thus far has been slow. Both our exporters and Japan's consumers would benefit from a prompt change to a more open agricultural market. Japanese consumers spend about 23 percent of their

DISPOSABLE INCOME ON FOOD (COMPARED TO 14 PERCENT IN THE U.S.), AND AT PRICES OF $15 A POUND AND MORE, THOSE EXPENDITURES DON'T INCLUDE MUCH BEEF.

IT IS NO SECRET THAT OUR THORNIEST AGRICULTURAL TRADE DISPUTE INVOLVES THE EUROPEAN COMMUNITY'S EXPORT SUBSIDY PRACTICES. EC AGRICULTURAL SURPLUSES ARE GENERATED BY HIGH INTERNAL SUPPORT PRICES. THESE SURPLUSES CAN ONLY BE EXPORTED WITH THE AID OF "RESTITUTIONS", OR SUBSIDIES, TO BRING THE EC PRICE DOWN TO THE WORLD MARKET LEVEL. BY RELYING ON EXPORT SUBSIDIES, THE EC IS ABLE TO DISPOSE OF SURPLUS PRODUCTION WITHOUT ADOPTING INTERNAL MEASURES TO BRING ABOUT MARKET-ORIENTED ADJUSTMENTS IN SUPPLY AND DEMAND.

THE EC OFTEN POINTS TO U.S. FARM SUPPORT PROGRAMS AS EVIDENCE THAT OUR AGRICULTURAL SYSTEMS ARE NOT ALL THAT DIFFERENT, BUT THE FACT IS THAT DIFFERENT DOMESTIC POLICIES AND ASPIRATIONS DEFINE AGRICULTURAL ISSUES IN THE U.S. AND THE EC. U.S. DOMESTIC AGRICULTURAL POLICIES LARGELY REFLECT OUR MARKET-ORIENTED ECONOMIC PHILOSOPHY; UNREALISTICALLY HIGH SUPPORT PRICES FOR A FEW COMMODITIES ARE THE EXCEPTION RATHER THAN THE RULE. THE EC'S COMMON AGRICULTURAL POLICY WAS DEVELOPED IN THE 1960'S PRIMARILY TO CREATE A UNIFIED INTERNAL MARKET, TO ENSURE INCREASING FARM INCOME AND TO

PROMOTE GREATER SELFSUFFICIENCY IN FOOD SUPPLIES. ARTIFICIALLY HIGH SUPPORT PRICES HAVE BEEN USED AS THE VEHICLE FOR REALIZING THESE OBJECTIVES.

SINCE DECEMBER OF LAST YEAR, WHEN SECRETARY SHULTZ AND OTHER CABINET MEMBERS MET WITH EC OFFICIALS IN BRUSSELS, WE HAVE BEEN ENGAGED IN A BILATERAL DIALOGUE WITH THE EC ON AGRICULTURAL ISSUES. THE NEXT MEETING IS SCHEDULED FOR JUNE 22-23 IN WASHINGTON. IN THOSE DISCUSSIONS, WE HAVE INFORMED THE EC THAT WE SEEK PROGRESS ON THE LONG-TERM FUNDAMENTAL ISSUE OF EXPORT SUBSIDIES, AS WELL AS ON COMMODITY-SPECIFIC PROBLEMS. MARKET-SHARING SCHEMES, WHICH TEND TO ENSHRINE THE PERMANENT USE OF SUBSIDIES FOR AGRICULTURAL TRADE, DO NOT PROVIDE A LONG-TERM SOLUTION.

THOSE DISCUSSIONS HAVE BEEN POSITIVE AND CONSTRUCTIVE, ACHIEVING PROGRESS, BUT NO MAJOR BREAKTHROUGH. THE EC COMMISSION NOW HAS A BETTER UNDERSTANDING OF OUR PROBLEMS. WE HAVE AGREED TO INTENSIFY THE FLOW OF INFORMATION ON ONE ANOTHER'S AGRICULTURAL PROGRAMS AND TRADE. A BILATERAL GROUP FOR THIS PROCESS WILL BE ESTABLISHED.

RECENT DEVELOPMENTS, HOWEVER, HAVE FURTHER STRENGTHENED OUR CONCERNS WITH EC AGRICULTURAL POLICIES. THE 1983-84 EC AGRICULTURAL PRICE PACKAGE, EVEN THOUGH MODERATE BY PAST STANDARDS, WILL FURTHER INCREASE THE GAP BETWEEN THE EC'S INTERNAL PRICES AND WORLD PRICES. FOR EXAMPLE, THROUGH ADJUSTMENT OF EC PRICES INTO NATIONAL CURRENCIES, THE FRENCH FARM SECTOR, THE COMMUNITY'S LARGEST AND POTENTIALLY THE MOST RESPONSIVE TO PRICE STIMULI, WILL RECEIVE A NINE PERCENT INCREASE. THE COMMISSION'S RECENT PROPOSAL TO INCREASE THE REVENUES DEVOTED TO THE CAP WOULD, IF ADOPTED, PERMIT INDEFINITE POSTPONEMENTS OF MEANINGFUL REFORM MEASURES.

WE HOPE THAT WE CAN CONVINCE THE COMMUNITY OF THE NECESSITY TO ADDRESS THE PROBLEMS CREATED BY ITS AGRICULTURAL POLICIES. THE U.S. AND THE EUROPEAN COMMUNITY ARE THE MOST IMPORTANT ACTORS IN WORLD AGRICULTURAL TRADE. WHETHER THE SYSTEM EVOLVES TOWARD GREATER LIBERALIZATION OR TOWARD GREATER USE OF IMPORT RESTRICTIONS AND EXPORT SUBSIDIES WILL DEPEND IN LARGE MEASURE ON THE WAY WE AND THE EC HANDLE OUR BILATERAL AGRICULTURAL TRADE PROBLEMS. IT IS IN THE INTERESTS OF BOTH OF US TO SEE THAT WE EVOLVE DOWN THE PATH OF LIBERALIZATION.

THE ROLE OF THE DEPARTMENT OF STATE

MANY OF YOU MAY ASK WHY THE DEPARTMENT OF STATE HAS BECOME INVOLVED IN AGRICULTURAL TRADE ISSUES. FROM MY PERSPECTIVE, THE DEPARTMENT SIMPLY HAS NO CHOICE BUT TO BECOME INVOLVED IN MAJOR INTERNATIONAL ECONOMIC ISSUES, AND AGRICULTURE CERTAINLY HAS BECOME AN INTERNATIONAL ISSUE WITHIN THE PAST DECADE.

AS AGRICULTURAL EXPORTS HAVE BECOME MORE IMPORTANT TO OUR ECONOMY, THE DEFENSE AND PROMOTION OF U.S. AGRICULTURAL INTERESTS ABROAD HAS INEVITABLY AND PROPERLY BECOME A KEY OBJECTIVE OF U.S. FOREIGN ECONOMIC POLICY. WE MUST WORK ACTIVELY TO RESOLVE INTERNATIONAL AGRICULTURAL TRADE PROBLEMS WHICH AFFECT OUR POLITICAL AND ECONOMIC RELATIONS WITH THE OTHER NATIONS OF THE WORLD. THE ENORMOUS ROLE OF THE U.S. IN WORLD AGRICULTURAL TRADE BRINGS AGRICULTURAL QUESTIONS TO THE CENTER OF OUR RELATIONS WITH OTHER COUNTRIES AND THEY CANNOT BE IGNORED. THE STATE DEPARTMENT IS ACTIVE IN PURSUING OUR AGRICULTURAL TRADE GOALS THROUGH THE FOLLOWING ACTIONS:

- PARTICIPATION IN EFFORTS TO REDUCE AND ELIMINATE TRADE BARRIERS OTHER COUNTRIES ERECT AGAINST FARM PRODUCTS;
- ASSISTING IN TRADE DISPUTES BETWEEN U.S. AGRICULTURAL EXPORTERS AND IMPORTING COUNTRIES;
- AND SUPPORT OF USDA'S MARKET DEVELOPMENT EFFORTS THROUGH OUR EMBASSIES AND OUR OWN CONTACTS WITH FOREIGN OFFICIALS.

AT THE WILLIAMSBURG SUMMIT, THE IMPORTANCE WHICH THE U.S. ATTACHES TO AN IMPROVEMENT OF AGRICULTURAL TRADE CONDITIONS WAS BROUGHT TO THE ATTENTION OF THE VISITING HEADS OF STATE. IN ADDITION TO THE SUMMIT'S FOCUS IN ECONOMIC RECOVERY, PARTICIPANTS COMMITTED THEMSELVES TO REVERSE RECENT TRENDS TOWARDS PROTECTIONISM AND TO PURSUE THE CURRENT WORK PROGRAMS IN THE GATT AND THE OECD.

THE U.S.-SOVIET LONG-TERM GRAIN AGREEMENT IS ANOTHER HIGHLY VISIBLE INTERNATIONAL AGRICULTURAL ISSUE. ON JUNE 2 A U.S. DELEGATION, MET WITH THE SOVIETS IN LONDON FOR TALKS ON A NEW AGREEMENT. THOSE TALKS WERE CONSTRUCTIVE AND WILL RESUME ON JUNE 20 IN MOSCOW. WHILE WE STILL HAVE A WAY TO GO, I AM HOPEFUL THAT WE WILL HAVE A NEW AGREEMENT THIS SUMMER.

AS THESE EXAMPLES INDICATE, IT IS ONLY BY INTEGRATING AGRICULTURAL CONCERNS INTO THE MAINSTREAM OF OUR AGENDAS WITH FOREIGN GOVERNMENTS THAT WE CAN HOPE TO GET RESULTS. WHEN THE STATE DEPARTMENT, USDA AND USTR SPEAK WITH ONE VOICE, THE MESSAGE WE TRANSMIT TO OTHER GOVERNMENTS IS CLEAR.

CONCLUSION

IN CONCLUSION, I WOULD LIKE TO STRESS ONCE AGAIN THAT AS AGRICULTURE HAS ASSUMED INTERNATIONAL IMPORTANCE, NEITHER AGRICULTURAL PROBLEMS NOR THEIR SOLUTIONS LIE SOLELY IN THE DOMESTIC ARENA. IN KEEPING WITH OUR LIBERAL TRADE PHILOSOPHY, OUR PRIMARY STRATEGY FOR REVERSING THE SLUMP IN AGRICULTURAL EXPORTS MUST BE A SUSTAINED AND RESOLUTE EFFORT TO ASSURE THAT U.S. EXPORTS CAN COMPETE FAIRLY IN WORLD MARKETS.

GIVEN THE CLOSE RELATIONSHIP OF INTERNATIONAL AGRICULTURAL ISSUES TO U.S. FOREIGN POLICY INTERESTS, THE DEPARTMENT OF STATE IS PREPARED TO PLAY AN ACTIVE ROLE IN THE FORMULATION AND IMPLEMENTATION OF POLICIES TO MEET OUR IMPORTANT AGRICULTURAL TRADE OBJECTIVES.

Representative Holt [presiding]. Thank you, gentlemen. I apologize for coming in late. It's the story of our lives here in Congress, and I'm sorry that I missed your testimony. If I ask questions that you have answered earlier, I hope that you'll forgive me and reanswer them for me.

You mentioned the flour sale. I've been using this as an example as I talk to people about the problems that we have. I think they sound insoluble. I don't know how you're going to solve them and I'm not sure anything that came out of Williamsburg is going to make it any better.

I serve on the Armed Services Committee and, of course, I frequently meet with representatives of our NATO allies. They constantly beat up on us about no two-way street. You know, invoking protectionism here in this country.

But on the flour sale, do you think that is a shot across the bow? Are we going to do more of that? I know that France is very upset about it and protesting a lot. Do you think we will continue in that direction?

Mr. Amstutz. I think the correct answer to the question relates to how the European Community responds to a specific proposal that we have made to the Community. And that proposal is that each of us, the European Community and the United States form a working group to address this all-important subject of the GATT code on subsidies on agricultural products, that we work toward redefining that code.

In other words, spelling out what the trade rules are in the way of the use of subsidies. Our proposal is that this group commence work at a very high level immediately and report back to ministers by the end of this calendar year. We should be hearing the European Community's response this coming week at our bilateral meetings. I would suggest that the manner in which the Community responds to this proposal, which we believe is a realistic and a reasonable one, will, in large part, determine what our options are after that particular time.

Representative Holt. Do you feel optimistic about the outcome of that?

Mr. Amstutz. I have not been with Government for very long and I have had——

Representative Holt. Just when you look at the problems, you see the political problems that we have—I know in dealing with my constituents, in dealing with the other Members of Congress from diverse districts, I see the real difficulty that we have here every time somebody wants to put a "Buy American" clause into every piece of legislation that we have.

Mr. Amstutz. Yes.

Representative Holt. I don't feel optimistic about it.

Mr. Amstutz. Yes. And as I was saying, I have not been with Government very long. I have had an opportunity to visit with leaders from the Community three times. My own personal thought is that there is recognition on their part that there is a problem, that we are, as Secretary Wallis has said, we are friends and that we should bilaterally seek a solution.

Now those who have had longer experience in Government and on this issue than I have are perhaps not so optimistic as I am. But I'm certainly hopeful because we have to find a solution.

Representative HOLT. I guess. I think you're right if we finally recognize the threat that's there. Of course the threat that we face in national security has kept us very closely allied in recognizing that we do have to work together in that area. So maybe we'll wake up and realize that it is very serious. And I think it is.

Mr. WALLIS. Perhaps I could add a comment to Secretary Amstutz. I've been in the Government only slightly longer than he has, but like him, I haven't been there long enough to give up hope.

Representative HOLT. It gets worse. [Laughter.]

Mr. WALLIS. And in particular, on that specific issue that you've raised, I do have some hope, not of an instant solution, but of a gradual solution over a period of time.

I was present when this work started with the EC. It was a meeting of—I think there were five of our Cabinet members there, full Cabinet members, and two or three of us sub-Cabinet officers, with the EC commissioners. And in the course of the conversation, Secretary Shultz, being an oldtime labor negotiator and listening to this argument, kept track of all the points where he detected some agreement. And after awhile he pointed out that he had a fair number of items on his list where there were some basic agreements, and he suggested that working from those, we could spread out gradually to cover more areas and to explore our areas of disagreement.

And so we've had several of these meetings. The wheat flour sale was regarded here very much like the 2 by 4 in the old story about getting the mule's attention.

Representative HOLT. Yes.

Mr. WALLIS. It did get their attention. It's not the kind of activity that could effectively be repeated. But it has to be recognized, and we recognize this, that they have major political obstacles within the EC to bring about a quick change.

Correspondingly, though, their programs that are causing the trouble are a tremendous burden within the Economic Community. All of those subsidies to the farmers are paid for by other people and the other people are increasingly beginning to complain. They've gotten to the point where something like 70 percent of the total budget of the EC goes to agricultural subsidies. And in the course of time, I think that that's going to create a counterpolitical force within the EC.

So I think that if we keep grinding on that problem, there is definitely going to be some progress. But it's always going to be too little from our point of view.

Representative HOLT. But the State Department does always play an active role in any of our negotiations in this area. Is that what you're saying?

Mr. WALLIS. Yes. I think in essentially all foreign relations, the State Department plays some role. But in this particular one, we've been quite active.

Representative HOLT. Mr. Lighthizer, you will be going to Moscow pretty soon. Who will accompany you? How do you think the negotiations will develop? I'm interested in what you think the process will be, and our objectives there. What kind of success do you anticipate or hope for?

Mr. LIGHTHIZER. First of all, let me say that Secretary Amstutz is going with me, along with a delegation of about eight people.

We had a first round of talks on the long-term grain agreement in London I guess 2 weeks ago, which talks, we thought, were friendly and constructive. At that meeting we decided to get together again, starting on the 20th in Moscow.

Representative HOLT. Who were the meetings with in London?

Mr. LIGHTHIZER. A Soviet delegation.

Representative HOLT. Their delegation.

Mr. LIGHTHIZER. Yes. And these were meetings to negotiate a new long-term agreement on grains.

Representative HOLT. Right.

Mr. LIGHTHIZER. It's difficult to get into too much detail about an ongoing negotiation, which I'm sure you understand.

Representative HOLT. Yes.

Mr. LIGHTHIZER. And it is also difficult to predict when they are going to end. We have a whole series of items that are on the agenda, most of which are contained in the current negotiation or in the current long-term agreement.

With the permission of the Chair, I would just as soon not spend too much time on the details of that negotiation. And I cannot predict at this time when it will be concluded.

Representative HOLT. It will probably be like the Mutual Balance Force Reductions. That's been going on about 20 years now. [Laughter.]

Mr. LIGHTHIZER. At least I personally do not expect to spend 20 years on this, Congresswoman Holt. [Laughter.]

Representative HOLT. I heard the new Ambassador over there said the other day that one good thing about his job was his tenure. So I hope that that's not what we're going to do in this area.

Secretary Amstutz, the President, in his 1984 budget, has proposed to reduce program levels for export loan guarantees from $4.8 to $3 billion, in direct export loans from $350 million to $100 million. Secretary Block, in recent statements, has indicated his support of these loan programs to expand exports. In your opinion, do you believe that these reductions could significantly impair our ability to compete in world markets?

Mr. AMSTUTZ. That's a very good question. I read in the paper this morning a report by the BIS, the Bank for International Settlements in Switzerland—it's been called the central banks' central banker. And I read that article rather quickly, but I believe it was saying that perhaps the single most important problem toward real economic recovery globally is the continued high level of interest rates in the United States.

Clearly, the strong dollar vis-a-vis other currencies, and the high level of interest rates in this country are impeding agricultural product exports. There is no question about that. One reason we have a problem competing is that because of our high interest rates, because of our strong dollar vis-a-vis other currencies, we, in that regard, create a price island of sorts here.

The President's budget is geared toward making some progress on this vexing budget deficit problem. And agriculture has as much interest in that as any segment of our economy.

And so we recognize that there has to be some belt-tightening in a number of areas so that we speed up this process of true recovery, economically in this country and globally.

Let me add by saying that we do our best to administer these credit guarantee programs judiciously and that we think they're good for American agriculture, that they're meeting one of the important competitive problems that we face globally.

Representative **Holt**. Well, I certainly appreciate your answer. I've been through the weak dollar and the strong dollar and the big budget deficits and I've been fighting it for 11 years now. I certainly know the the problem and I commend the President. I think he's moving in the right direction. But it's going to be a very tough problem.

Mr. Lighthizer, in your prepared statement you state that demand for farm products will probably not pick up for at least 3 to 5 years. We have had 4 consecutive years of record low income.

Do you feel we're going to have to go another 5 years with that kind of low income in the farm area?

Mr. **Lighthizer**. No, Congresswoman Holt. We don't necessarily feel that. We think, though, that the global economic situation will limit our agricultural exports over the next few years as the recovery takes hold. But it certainly is not the administration's position that farm incomes will be down over that period.

Maybe Dan, do you have——

Mr. **Amstutz**. I had not seen the Ambassador's testimony. Partly, it depends on the vagaries of weather and these other factors that we have addressed. But we're not so pessimistic as indicated by those figures that are included in his testimony.

Representative **Holt**. Good. In your judgment, would the inclusion of the Department of Agriculture's export trade function in the proposed "Department of Trade" enhance our relations with other countries?

Mr. **Amstutz**. Congresswoman Holt, you ask such very good questions.

Representative **Holt**. That's what we're trying to do. [Laughter.]

Mr. **Amstutz**. There is an inter-agency process currently underway on this proposed legislation and our department is engaged in that inter-agency process. I do note that Secretary Baldrige, when talking of the desirability of this legislation, had mentioned that one problem area that he hoped would be addressed with this legislation is that there be no divisions between policy and its implementation. And I believe the Department of Commerce had some difficulty with such a division prior to this legislation.

It's our desire that in agriculture, where we have not had such a—where we have been fortunate that there has not been a division between policy and implementation, that no division be created by this legislation. That's one area that we're working in this inter-agency process.

Representative **Holt**. How would USDA fit into it?

Mr. **Amstutz**. We think it's the intent of the administration for the U.S. Department of Agriculture to continue functioning as it's functioning now. And when I talk of this inter-agency process to insure that there is no division between policy and implementation, it's along those lines that we're working.

I believe that's the intent of the administration.

Representative HOLT. I have no further questions. Does staff have any questions.

[Mr. Tosterud nods in the negative.]

Representative HOLT. I would like to ask unanimous consent that Mr. Lighthizer's responses to Congresswoman Snow's written questions be included in the record at the close of this hearing. And since I'm the only one here, I'll give unanimous consent. [Laughter.]

Mr. TOSTERUD. I just have a couple of questions that the chairman wanted to be sure to have asked, and it's to each member of the panel.

The U.S. share of the world grain market has declined from 56 percent in 1979 to less than a projected 50 percent in 1983. How and when can we expect a reversal in this disastrous trend? Under what conditions, that is, how bad do things have to get before we would become full combatants in an agricultural trade war?

Mr. Amstutz.

Mr. AMSTUTZ. Before joining Government, I made my living being a trader of grain and other farm products. There was an old saying that the cure for high prices is high prices and the cure for low prices is low prices.

In other words, when prices get high enough, whether because of free market forces or governmental action, when they get high enough to make it very profitable to produce more and more, more and more will be produced. And eventually, supplies will exceed demand.

Conversely, when prices get so low, either because of free market forces or governmental actions, that it is simply not economic to produce, that those who are noneconomic producers will fall by the wayside and prices will once again turn and head up.

In a generic sense, if I can use that term, we created, we in this country created one of these high price situations where the cure is high prices. We created a bit of an island in our country because of the Soviet grain embargo, where we didn't have access to an all-important import market. And by us taking access to that market away from ourselves, we invited others, other competing nations, to produce for that market.

We adopted farm programs that assumed the rate of inflation and therefore, cost of farming to our farmers was going to accelerate at rather an astounding annual rate.

Other countries undoubtedly made similar assumptions and similarly added to this production of surpluses globally relative to demand potential.

Long range, I personally, and I know the Secretary also, have the belief that American agriculture is truly efficient and American agriculture can compete and compete aggressively in world markets if left to its own ways, if left to the market forces as opposed to Government forces.

And therefore, we advocate market-oriented programs insured to what in our judgment keep us competitive long range in the market places of the world.

On a short-range situation, where we still have this problem of surplus relative to demand, I really think that if the community, the European Economic Community, will sit down with us and discuss these issues that we have raised and that if we are successful in gaining access to the Soviet market vis these long-term agreement negotiations that are underway, and if we are successful in maintaining good agricultural relationships with the People's Republic of China, and remember the problems we created in domestic farm programs, that we can, indeed, compete and that it would be foolhardy for me to try to predict when a certain percentage of our penetration will reach certain levels because I can't make such a prediction. But I think the opportunity is there for us and the challenge is there for us. I have a feeling, because of the well publicized cost of farm programs these days, and we read about it is the press so frequently, I have fear that maybe we're at a crossroads. Maybe we're at a crossroads and down one road we go toward acreage restrictions—heaven forbid, maybe even marketing quotas, and down the other road is to produce for the market.

The Secretary said when he announced the PIK program how pleased he was that farmers did respond so positively to the program because it truly was addressing current needs that they had. Farmers had problems. They looked to their Government to do something about it and their Government did, with a temporary program, a short-term program.

At the same time the Secretary announced the program sign-up, he said what a shame it is to take 80 some million acres out of production. Many of those acres are good, productive acres.

So it's our desire to crank, to utilize this productive machine that is American agriculture to the optimum, to employ acres as they should be employed, can be employed for production, in market-oriented programs where producers are producing for the market as opposed to programs that would, by necessity, be restrictive or they're producing for the program, we think is the true answer.

That's an awfully rambling answer to your question, but I think it does address it.

Mr. TOSTERUD. Mr. Lighthizer.

Mr LIGHTHIZER. I, first of all, agree with Dan's comments. But let me address this question specifically of a trade war. I believe the administration very much wants to avoid a trade war in agriculture or in any other area. And the answer, I believe, lies in an effective dispute settlement procedure at the GATT.

And with respect to that, we at USTR believe we are at a crossroads. We are at the point now where we're going to determine whether or not the GATT dispute settlement procedure can be used effectively to stop unfair trade practices by others.

If we determine that it is not, then we have to make some difficult decisions. At this point, the jury is still out. The first couple of panel reports that have come back in the last few days, as you know, or at least the subsidies committee has considered them within the last few days, and we really are at a crossroads. But the way to avoid a trade war is to have the GATT system work with respect to agriculture. We will, I suspect, before very long have an answer on that.

That's the only thing that I would add to the Secretary's comments.

Mr. TOSTERUD. Excuse me. What options are available to us outside GATT, if, in fact, you conclude that GATT is of little use to the United States?

Mr. LIGHTHIZER. Well, I don't want to speculate on what we would do if that were the case. But, clearly, unilateral action—I mean, there are a variety of ways that you can act unilaterally to try to regress grievances if they are not effectively dealt with in the GATT. And one example of such an action might be the Egyptian wheat flour sale.

Mr. TOSTERUD. Thank you very much, Mr. Lighthizer. Secretary Wallis, do you have a comment, please?

Mr. WALLIS. I have nothing really to add to what the previous two speakers have said, except to point out that there are processes underway for strengthening the GATT. We don't necessarily have to rely on GATT remaining permanently the way it is now. There's a possibility of revising the procedures. And at the Williamsburg summit, the third numbered paragraph in the declaration goes into that subject. It says we should work to achieve further trade liberalization negotiations in the GATT with particular emphasis on expanding trade with and among developing countries.

That's one sentence that I have lifted out of context there, but the rest of the paragraph is the same in general tone.

So I really have nothing further to add.

Representative HOLT. Mr. Wallis, my farmers, every time we do anything in foreign policy, complain that we are more concerned about others than we are ourselves. That's the political perception that we have to deal with. I'm sure you're aware of that in every area.

But have you had an opportunity to look at S. 822, the Agricultural Export Equity and Market Expansion Act of 1983? It requires the Secretary of Agriculture to sell for export surplus dairy products, establishes an export payment-in-kind program, exempts from cargo preference laws, future export PIK or blended credit sales, and requires the Commodity Credit Corporation to use its surplus commodities to barter for strategic and critical materials.

How does the State Department feel about that? Would you endorse that kind of legislation?

Mr. WALLIS. Well, I think the administration has not stated a definite position on that legislation. As I understand it, and I haven't actually read the bill myself, but I've been aware of it, as I understand it, all of the powers in the bill already exist for the Government. The only difference is it's mandated that some of them be used.

On the whole, I think that that would get you into the problem the Secretary indicated earlier of a trade war.

One of the problems that we have to keep in mind about getting into a trade war, besides all the other objections, is that the very people with whom we have the greatest problems on agriculture are the same people with whom we have the greatest export surpluses. That is, the European Community and Japan are the two biggest customers for our agricultural products. They are also the two biggest sources of problems.

Representative HOLT. Well, it's a tough question. It really is. And I certainly don't envy you having to deal with it.

Senator Jepsen had hoped to be able to return, but it looks as if he's been detained on the floor. So I guess we'll adjourn the meeting at this point. Our next hearing will be on June 16 at 10 a.m. in this room on the economic condition and prospect—oh, here he is. Here's the Senator. Hooray. [Laughter.]

Senator JEPSEN [presiding]. Briefly, then we will adjourn. Mr. Amstutz, from your view, is the purpose of the blended credit program to fight subsidies or to expand markets, or both?

Mr. AMSTUTZ. Mr. Chairman, I have to say that in the brief time I've been with the Government, there seem to be some differences within various agencies of the Government as to the purposes for the blended credit program. We think that the use of the program to fight subsidization by other exporting countries is one of its uses. But with all of our programs, Public Law 480 and our credit guarantee programs, we think it awfully important that the market development aspects of them and of it specifically in the blended credit program are important criteria. We also, in our blended credit program, try to insure from our agency's standpoint the credit-worthiness of the recipient country is assured and we attempt in administering this blended credit program, we attempt to insure to the maximum extent we are able that there will not be a displacement of shipments into international markets from those competing nations that do not engage in subsidized practices.

Senator JEPSEN. Well, now, I hear you say "we." I assume that is your Department, the USDA and so on. They do not share the opinion that expanded markets are good for blended credit, although it has proven to be good for expanding markets.

Is OMB not in concert with that?

Mr. AMSTUTZ. Mr. Chairman, I always hesitate to speak for those who are not here to speak for themselves.

Senator JEPSEN. I don't mean to put you on the spot. To the best of your knowledge, do you have any reason to believe, either by conversation, by order, by meetings, or anything else that the Office of Management and Budget feels that expanding markets are not the function of blended credits?

It's my understanding that they feel that way. I'll tell you that ahead of time.

Mr. AMSTUTZ. Yes. There is certain belief in certain quarters that the sole purpose of blended credit is to use in combating specific subsidized practices.

Senator JEPSEN. Can you imagine what the rationale is behind the thinking of anybody in our Government who understands the total picture of agriculture and Government working together, yet would in any way drag their feet in expanding markets for our agriculture products?

Mr. AMSTUTZ. Mr. Chairman, the only answer that I can give is my own personal thoughts on this that might be oversimplified. And if they are, I apologize. But it's possible that those not working on a daily basis with this problem we have in competing in agricultural markets and in doing what we can to expand them perhaps feel that the only impediment to increased U.S. exports is specific subsidization by specific exporting countries.

There are a number of ways countries can subsidize. They can subsidize where government sets price by just setting price at a subsidized level for the books so that that might not be considered subsidy. Governments can via their treasuries subsidize interest rates. And for the books, technically, that might not be regarded as a subsidy.

So I think this apparent disagreement within some of our agencies is unfortunate. I guess perhaps some of it understandable as it relates to the time one spends in fighting the problem.

Senator **Jepsen**. Well, hopefully, with some ventilation of ideas and sharing of opinions, we can clear the air on that, I think.

Mr. Wallis, I met you for the first time this morning. It's a pleasure. I would ask you what role will the State Department play during the negotiations on long-term grain agreements with the Soviet Union that are going on now? Do you know? Have you been involved? Do you intend to be involved?

Mr. **Wallis**. The State Department will be involved. I won't personally be involved, but I believe it was the Secretary who initiated the opening of the question and brought it up with the President, who then authorized proceeding with the negotiations.

Ambassador Lighthizer mentioned while you were out that he will have a delegation of eight, and I've forgotten—there's at least one State Department person, two State Department people on it.

Senator **Jepsen**. All right. Do you believe that embargoes should be used as part of our foreign policy arsenal?

Mr. **Wallis**. Well, as part of the arsenal? Let me ask you to clarify the question.

Senator **Jepsen**. Well, as part of our implementing foreign policy. Do you believe that unilateral embargoes should be used to implement foreign policy?

Mr. **Wallis**. I think there are probably cases where they should. But they certainly should be used with great reserve.

Senator **Jepsen**. How about you, Mr. Lighthizer?

Mr. **Lighthizer**. Well, that is peculiarly a question within the expertise of Secretary Wallis. I believe that with respect to agriculture, this administration did not support the embargo—does not support the embargo.

Senator **Jepsen**. There's no question about what the President supports. He lifted the embargo. I'm asking what the State Department supports.

Mr. **Lighthizer**. Well, I'm not with the State Department, so it's hard for me to say. USTR certainly supports the President.

Senator **Jepsen**. OK. What does the Trade Department support?

Mr. **Lighthizer**. We support the President on that completely.

Senator **Jepsen**. You support the President. That's a good answer. Mr. Amstutz.

Mr. **Amstutz**. Mr. Chairman, you know my answer. We wholeheartedly support the President's policy.

Senator **Jepsen**. Again, for the record, and I don't mean to be an old saw, but I thought maybe we had it corrected. I guess it may be absolutely necessary to state that a unilaterally imposed embargo on the agricultural community of this country to help support and implement foreign policy is absolutely inane and ridiculous. We should do business. We should make the Soviets or anyone else that we can trade with—pay in real money. We're going to give a little lesson in foreign policy to the State Department here. Make them pay in real money, and the more consumer-oriented their society becomes, the more value they'll place on peaceful co-existence.

The more they spend with the West, the less they'll have for the military. They steal or buy all the technology we create, anyway.

So I think we ought to get with it. An embargo should never be imposed again or even suggested. If we don't get a long-term agreement, we've got some deep financial economic problems in this country and we have a sustained economic recovery now. Even the thought that it might be imposed should send shivers up and down every economist, every consumer and agriculture itself—in fact, most every citizen in this country.

I guess you know how I feel about it.

Mr. **Wallis**. What you're saying is entirely consistent with the State Department's view. You asked originally, not of me as I understood it, at least, not about agricultural embargoes, specifically, but whether that tool, weapon, should be in the arsenal for foreign policy purposes. And on the agricultural, the wheat thing, as the other two speakers have said, the President has made his position clear and that's the State Department's position.

Senator **Jepsen**. Good. [Laughter.]

The Chair would advise that the next hearing, which is June 16, will be covering the subject of "Economic Condition and the Prospects of Agriculture and Rural Business." We'll have John Urbanchuk of Wharton Econonmetrics, Brady Deaton of Virginia Polytechnic Institute, and Emmett Barker, president of the Farm and Industrial Equipment Institute with us on that day.

The Chair thanks the distinguished witnesses this morning for their testimony. I do regret that we did have stacked votes this morning. It was something that happened long after we had this meeting scheduled. I appreciate the information and I am certainly grateful for your answers. A very emotional issue with those of us involved with agriculture in this country is that we don't want any more embargoes and we don't want them even considered.

The long-term agreements are being started again when, Mr. Amstutz?

Mr. **Amstutz**. Well, our second round of meetings begin June 20 in Moscow.

Senator **Jepsen**. How do you feel about these to date? Are we making progress?

Mr. **Amstutz**. As Ambassador Lighthizer said when you were out of the room, our first meetings were certainly constructive and friendly. And, in my judgment, that's a very healthy sign.

Senator **Jepsen**. You might note that Senator Dole and I—in fact, I specifically asked Ambassador Dobrynin's assistant, who handles agricultural issues here in Washington—I hesitate to pronounce his name because I might get it wrong, but you know who I'm referring to—about the chances of success for a long-term agreement. His answer was "We don't enter into any negotiations if there's no chance of doing something."

So I took that as being very hopeful.

Mr. AMSTUTZ. Yes.

Senator JEPSEN. Good luck on your negotiations.

Mr. AMSTUTZ. Thank you, sir.

Senator JEPSEN. The whole country is watching you.

Mr. AMSTUTZ. Thank you, Mr. Chairman.

Senator JEPSEN. Thank you. The committee is adjourned.

[Whereupon, at 11:26 a.m., the committee adjourned, subject to the call of the Chair.]

[The following information was subsequently supplied for the record:]

RESPONSE OF HON. ROBERT E. LIGHTHIZER TO WRITTEN QUESTIONS POSED BY REPRESENTATIVE SNOWE

Question 1. As you are well aware, our international markets are being seriously threatened by subsidized foreign competitors. Many agricultural industries in Maine such as the poultry, egg, and potato industries, are being financially squeezed out of export markets. In light of the present situation, do you feel the President requires new international negotiating authority regarding agricultural exports?

Answer. We are confident that the Administration currently has sufficient negotiating authority—as well as considerable latitude to develop and implement countermeasures—to respond appropriately to subsidized competition in agricultural export markets. One fundamental goal is the elimination of all agricultural export subsidies which distort efficient trade patterns. The challenge is to use our export subsidy authority to complement and reinforce our efforts to negotiate for greater international discipline over the use of agricultural export subsidies. These efforts require careful orchestration so that actions aimed at putting pressure on countries which now subsidize do not result in the further proliferation of agricultural export subsidies.

Question 2. Since September 1981, the U.S. poultry industry has had a 301 petition pending before the U.S. Trade Representative regarding the unfair use of export subsidies by the European Community. Does the USTR plan to evaluate this petition further? Do you feel the President needs stronger authority under Section 301 to expedite this case and obtain a successful conclusion?

Answer. The 301 petition on poultry has taken longer to adjudicate than we would have liked, but a number of factors have been responsible for this. First of all, the petitioners filed their petition only on the basis of EC subsidy programs. After USTR held consultations with the European Community, we found that Brazil, which also subsidizes its poultry exports, was also responsible for the loss of U.S. export sales in the Middle East. The petitioners requested that Brazil be brought into the complaint. This necessitated consultations under the Subsidies Code with Brazil in order to bring the Brazilian element of the case in line with the EC element. These consultations were held on April 1, 1983.

A trilateral meeting of Sub-cabinet officials from the United States, EC, and Brazil to discuss poultry was held June 23 and 24 in Washington. Neither the EC nor the Brazilian delegation could commit to eliminating export subsidies on poultry. The United States will decide shortly whether to file a request for conciliation in the GATT Subsidies Code as the best means for working toward a solution in this case or whether continuing bilateral efforts will be more productive. During this process, USTR has kept and will continue to keep in close contact with the petitioners.

I do not feel the President needs stronger authority under Section 301 to expedite this case and obtain a successful conclusion. In this particular case, the President's authority under Section 301 is adequate to obtain a successful conclusion.

Question 3. Do you feel the enactment of "Reciprocity" trade legislation would be one way to improve U.S. industries on equal footing with their foreign competitors?

Answer. Fair and equitable market opportunities for U.S. exporters, investors, and service industries, has been and will continue to be a goal of this Administration. In this perspective, this Administration believes that appropriate legislation can be of great assistance in achieving our international objectives and therefore strongly supports legislation, S. 144, introduced by Senator Danforth and passed by the Senate. As you know, similar legislation has been introduced in the House by Congressman Jones (H.R. 1571). We are currently reviewing this legislation as well.

This legislation will help U.S. industries by mandating new international negotiations to seek the elimination of barriers and encourage fair and open trade in services, investment, and high technology. Under existing law, the bill clarifies and enhances Presidential authority to retaliate against unfair trading practices. In addition, the legislation requires an annual report to Congress on major foreign barriers and distortions to U.S. exports of goods, services, and investments. This report could help set comprehensive priorities for U.S. trade policy.

Question 4. Could you please comment on the Adminsitration's plan to create a new Department of International Trade and Industry. Do you believe the new Department will provide better coordination between Commerce and USTR to address the problems affecting our agricultural exports?

Answer. Agricultural exports are critically important to our economy. Our nation's farmers depend on this government to ensure they have ready access to the world market. The Department of Agriculture's Foreign Agricultural Service (FAS) has done an excellent job promoting U.S. farm products, and under our reorganization palns, FAS will continue its unique role in U.S. agricultural trade. In addition, the Secretary of Agriculture will serve as Vice Chairman of the interagency council that will be set up to advise the President on trade and the competitive position of U.S. industry.

THE UNITED STATES TRADE REPRESENTATIVE
WASHINGTON
20506

August 3, 1983

The Honorable Roger Jepsen
United States Senate
Washington, D.C. 20510

Dear Roger:

President Reagan asked that I respond to the letter of July 18 signed by you and 69 of your Senate colleagues which recommended an export program for poultry and eggs.

As you may know from our continuing discussions with the Congress on this matter, the Administration is very concerned about protecting our agricultural export markets from further erosion due to unfair subsidy practices of competing nations. We have been particularly disturbed by the growing volume of poultry and egg sales lost in overseas markets due to foreign subsidies. While our fundamental objective is to resolve this matter through negotiations with the subsidizing countries, we have not ruled out carefully selected subsidized sales -- such as the Egypt wheat flour sale -- to complement and assist our negotiating efforts.

We agree that an effective solution to the problem facing our agricultural producers and exporters will require the consolidated efforts of the Administration and the Congress. Accordingly, I can assure you that my Office will give full consideration to the recommendation you and your colleagues have made as we continue to develop and implement strategies for increasing international discipline over the use of agricultural export subsidies.

Very truly yours,

WILLIAM E. BROCK

WEB:cdc

TOWARD THE NEXT GENERATION OF FARM POLICY

THURSDAY, JUNE 16, 1983

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON AGRICULTURE AND TRANSPORTATION
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10 a.m., in room SD-124, Dirksen Senate Office Building, Hon. James Abdnor (chairman of the subcommittee) presiding.

Present: Senator Abdnor.

Also present: Robert J. Tosterud, professional staff member.

OPENING STATEMENT OF SENATOR ABDNOR, CHAIRMAN

Senator ABDNOR. The Subcommittee on Agriculture and Transportation of the Joint Economic Committee will come to order.

The focus of today's hearing is the economic condition and prospects of agricultural and rural business.

Our witnesses, we're happy to say, are John Urbanchuk, who is the director of agricultural services at Wharton Econometrics, and Prof. Brady Deaton of VPI. We are certainly delighted that both of you could be here today to add a great deal of importance and prestige to our hearings, because you both represent a source of information that certainly has to be taken into consideration whenever we're talking about farm policy and our direction for the future.

It's often said that misery loves company. The current misery of this country's largest industry—agriculture—is deep and broad. More than 23 million Americans, a full 20 percent of total employment, rely in one way or the other on agriculture for jobs. Only 3.4 million are directly involved in farming. Production in agriculture generates over 20 million off-farm jobs—6.7 million jobs in the food and fiber processing and manufacturing sector; 7.6 million in food and fiber transportation, wholesaling and retailing; 3.3 million in restaurants; and 2½ million in farm input supplies and services.

But as impressive as these figures are, they do not come close to gaging the full influence of U.S. agriculture on our society. I ask everyone to try to visualize an America without agriculture, and then try and comprehend the world without American agriculture. Even a very superficial analysis would suggest staggering consequences.

Many would argue that such an analysis would be scare tactics and purely theoretical. But I would ask you to consider just the following:

One, this year U.S. farmers are idling one-third of their base cropland acreage.

Two, the production of feed grains in 1983-84 is forecast to decline 26 percent from last year; wheat production down 16 percent; soybean production, down 9 percent; rice production, down 33 percent; and cotton production down 27 percent.

Three, the U.S. share of the world grain market has declined from 56 percent in 1979 to a projected less than 50 percent this year.

Four, in 1983, the U.S. farmers will reduce their production of grain by 80 million metric tons, while the rest of the world will increase grain production by 50 million metric tons.

Five, the U.S. ending stocks of grain in 1983-84 will be down 24 percent while world ending stocks will be off only 8 percent.

Six, we are finding that farm bankruptcies are occurring at a record pace.

Seven, according to the Department of Agriculture projections, 1983 will mark the fourth consecutive year of depression-level real farm net income.

Eight, the Office of U.S. Trade Representative expects that the demand for farm products will probably not pick up to any great extent for at least the next 3 to 5 years. In addition, the European Economic Community, our largest export competitor, will continue its policy of providing excessive stimulation to its farmers to expand their agricultural production.

Nine, after the most massive and costly supply control program in our history, grain prices have declined since the first of the year, indicating that we may have already seen the short- and mid-term price enhancement benefits of the payment-in-kind program. Our ability to influence world prices through our unilateral efforts to reduce production is certainly in question and may be futile and counter-productive to U.S. interests.

Ten, because of the transferability of agricultural technology and the political and economic appeal of expanding agricultural production in many foreign countries, the rest of the grain-producing world is more than capable and anxious to replace the United States as a grain exporter and producer. Much of the world is just beginning to discover fertilizers.

And last, and perhaps the most telling and discouraging indicator of an American agriculture in jeopardy is the public's indifference to the economic condition of agriculture and its questionable willingness to support, through higher food prices, an agricultural economic recovery.

Joining American farmers on the frontline are thousands of small and large farm input, supply and marketing firms and countless rural businesses and communities. One hopes that in some way soon their combined influence on the direction of national economic policy will be in proportion to the combined economic distress.

Again, I just want to remind our national public radio audience that they can participate in these hearings by sending their views on future farm policy to Box A, Joint Economic Committee, Washington, D.C. 20510.

And with that, I would also like to ask unanimous consent that I include in the printed record the opening statement of Senator

Roger W. Jepsen, chairman of the Joint Economic Committee, who has been very, very active in this subcommittee and on the subject of agriculture. As you know, gentleman, the Congress has so many things going on right now. Senator Jepsen wanted to be here today, but could not, unfortunately.

[The opening statement of Senator Jepsen follows:]

OPENING STATEMENT OF HON. ROGER W. JEPSEN

Welcome, gentlemen:

Today we look at yet another dimension of the farm problem: the economic condition and prospects of agricultural and rural businesses.

The tight world food situation of the early seventies not only triggered a decade of expansion by American farmers but also greatly stimulated investment in agriculture's many support industries.

Agriculture's purchases of manufactured inputs between 1970 and 1980 more than quadrupled from $5.4 billion to $23.1 billion. During the 1970s farm expenditures on fertilizer increased better than four times; petroleum purchases climbed from $1.7 billion to over $8.0 billion; purchases of pesticides rose from less than $1 billion to $3.3 billion; and the value of machinery and motor vehicles on farms increased from $28.4 billion to $90.8 billion. In addition, agriculture's use of transportation and marketing services and facilities has grown in direct proportion to its 30 percent increase in output over the last ten years.

The point I wish to make is that billions of dollars have been invested and millions of jobs created in non-production agriculture. Therefore, a deteriorating farming sector jeopardizes the world's most efficient and responsive farm support and food distribution system with grave global implications.

It's critically important to recognize, in my judgment, that while we all look for, and expect, an agricultural economic recovery, that recovery can only be sustained with the support of viable rural communities and a healthy and progressive farm services industry.

Again, welcome, gentlemen.

Senator ABDNOR. Now I know I gave a lengthy opening statement. It was far too long and maybe a gloomy one. But I think we ought to call a spade a spade and put things as they really are into the picture, so that all of us know what we're up against.

We're trying to find some answers and I couldn't think of a better duo to get comments from than the two distinguished gentlemen we have with us today.

Mr. Urbanchuk, please proceed as you wish.

STATEMENT OF JOHN M. URBANCHUK, DIRECTOR, INTERNATIONAL AGRICULTURE SERVICE, WHARTON ECONOMETRIC FORECASTING ASSOCIATES, INC., PHILADELPHIA, PA.

Mr. URBANCHUK. Thank you very much, Mr. Chairman. I appreciate the opportunity to appear before the subcommittee to discuss the economic condition and prospects for agriculture and rural business. During the past several years, the entire U.S. agricultural sector—including not only producers, but the firms and industries that support agriculture in terms of inputs, supplies, and services, and those rural businesses who, by virtue of their location, depend on the agricultural sector and the farmer for their livelihood and their well-being--has been substantially affected over the past several years by various factors, external and internal. These factors include a very severe U.S. and world recession, which has had a substantial impact on reducing the demand for agricultural products, not only in the United States, but abroad as well.

High domestic interest rates, which have had an effect on the exchange rate and the strength of the dollar, a point we'll come to next, have also had an impact on investment decisions with regard to farm equipment and machinery, and have also affected business' abilities and willingness to do such things as carry inventories.

The third factor, as I just alluded to, is the strong U.S. dollar, which has placed the exports of U.S. commodities at a competitive disadvantage in the world marketplace.

Fourth, with regard to farm policy, the 1980 Soviet grain embargo and the subsequent hard-line policy that the United States has taken with regard to agricultural trade in the Soviet Union have effectively limited our participation in that very, very large export market for U.S. wheat and coarse grains.

The next major point is one, really, that's internal; that is, we have been blessed—and it's a mixed blessing—with exceptionally good crops in 3 of the last 4 years. This condition has helped bring us to the position where we're both enjoying and suffering under record stock levels.

This combination of factors has resulted, as I said, in an unprecedented accumulation of stocks and, until very recently, very weak farm prices. As a result, net farm income, farmer cash flow, and producer profitability have declined, reducing the market for inputs and services.

While it appears that the U.S. economy is recovering, and consumer demand and industrial activity are beginning to improve, it's somewhat ironic that the program designed to reduce production, draw down stocks, and return American agriculture to a more profitable footing—that is, the 1983 PIK program—will most likely prevent most of the U.S. agricultural sector and the supporting industries from participating in this recovery, at least for the near term.

The 1983 PIK program will idle 82 million acres, 65 million acres of planted area below last year's levels. We estimate that the cost to the input supply industries of this program—that is, the reduction in area—will be somewhere in the area of $5 to $7 billion, and that's a reduction of 15 to 20 percent in gross sales.

Within this, the hardest hit industries from a manufacturing perspective will be farm equipment manufacturers and dealers, the fertilizer industry, and, to a lesser extent, the agricultural chemicals and seed industries.

Now from input supply, because of fewer planted acres, fewer pieces of equipment will be required for working that planted area. Clearly, the impact of reduced acreage is most directly demonstrated in terms of the fertilizer area, in that fewer planted areas mean fewer applications of fertilizer. Agricultural chemicals and seed, as I indicated, will be adversely affected, but there's more room for flexibility on the part of applications to those industries, so that the impacts won't be as substantial.

That's from the manufacturing side. Another major area that will be affected very substantially are the distributors at the local level, of not only inputs but services. And, in a large part, we're talking about the cooperatives, who are very prevalent in supply industries in the rural areas.

Now because of reduced markets, these companies are faced, of course, with the conditions we talked about earlier, and that is increased interest rates, which affect the ability and willingness to carry inventories, and also the decline in market, which will be experienced through the remainder of 1983.

We do expect the 1983 PIK program to work. That is, stocks will be reduced, particularly the category of stocks in the Government control—that is, the farmer-held and CCC inventories will be drawn down—and prices will most likely increase.

More important than the impact on farm income—which we expect to be experiencing in the 1984-85 period, when, in essence, we end up dealing with this program—is that PIK is apparently taking away short-term benefits for longer term gains. So we expect very modest increases in net farm income for 1983, with the remaining and substantial increases coming in 1984-85.

The participation in the recovery that I talked about in the agricultural supply industries will most likely come about in 1984 and 1985.

Now the outlook for the 1980's. The 1980's are not likely to duplicate the substantial growth experienced in the U.S. agricultural sector in the 1970's. Most of the growth that we had during the 1970's was largely associated with rapidly expanding foreign markets of U.S. exports. This growth during the next 5 or 10 years is likely to be restrained by a number of factors, including the severity of the global recession that we're recovering from right now and the debt and financing problems of many less developed and developing countries, and centrally planned economies, which are likely to remain impediments to increasing demand for grain largely from the United States, particularly in those areas.

Now in our opinion, the outlook for growth in U.S. agriculture—and you can't separate the health and prosperity of the agricultural sector from the health of the rural businesses and the agricultural industries in those particular areas—depends on three major factors:

One is a sustained and strong recovery in not only the United States, but the world economy.

Second is the ability of the United States to compete aggressively in the world agricultural markets; that is, at least maintain our current shares of world market, or possible increase those shares of world market.

Third is the future direction of farm policy, particularly with regard to the formulation of area control programs such as the 1983 PIK program or similar programs to try and restrain production through acreage, as well as the establishment of loan rates and support prices.

Now in a macroaspect, we do expect that the world macroeconomic environment over the next several years and the environment in the United States will generally be favorable for increased agricultural demand, particularly in the United States and in the OECD countries. The environment will be less favorable to the less developed countries and the centrally planned economies, which, as I indicated earlier, will still be constrained by substantial debt burdens and financing problems, which will curtail, if not the demand for grain, certainly their ability to finance imports.

We also expect that we will generally see improvements in inflation, with inflation increasing at relatively modest rates. Now this has a substantial impact on the agricultural sector because it will help restrain growth in farm production expenses. We are also not expecting any major increases in interest rates over the next several years and, as a result, we're looking for declines in the U.S. dollar, particularly in 1984 and 1985. So, generally, from a macroeconomic perspective, the environment appears to be relatively favorable.

On the trade side, as you indicated yourself, Mr. Chairman, the United States has begun to see increasing competition in the world markets for agricultural products. To put the United States into perspective, we produce 16 percent of the world's wheat crop and we supply currently about 42 percent. We produce one-third of the world's coarse grains and supply about 62 percent of world trade. We produce two-thirds of the world's soybeans and supply roughly 90 percent of all the world's soybeans in the world marketplace.

Now major factors that have hit the U.S. trade position with regard to agriculture have been, first, the strong dollar—which has put us at a competitive disadvantage, particularly with regard to the European Community—and, second, the U.S. grain embargo against the Soviet Union in 1980. What this grain embargo, in our opinion, has essentially done is that it has shown the Soviet Union that it's an unwise policy to rely on one supplier exclusively for your commodities. The Soviets have been particularly aggressive over the past several years in identifying alternative sources of grain among major competitors to the United States. Not only have they identified other major sources of grain, but they have signed long-term grain trade agreements with other countries. These include Canada, Argentina, and the European Community, notably France, which is the largest producer within the European Community.

This has signaled our major competitors, particularly the European Community and Argentina, that there is a substantial world market out there to be had at U.S. expense, and they have been very aggressive in: One, adopting policies to promote exports and subsidize exports and, two, to look for alternative sources of export market to the Soviet Union.

This has also signaled our major competitors to move ahead and aggressively increase production. And what we have seen is substantial increases in production in both the European Community, with France being the most substantial participant there, as well as Argentina, which has increased her production capabilities, particularly in the area of wheat and coarse grains, by roughly 300 percent over the last 10 years.

Now, with regard to the question of subsidies, and the current dispute and disagreement with regard to the European Community over trade subsidies, there has to be some degree of caution voiced with regard to U.S. policies, and that is the following: We expect that U.S. wheat shipments to the Soviet Union for the 1982–83 year will be roughly half of what they were 1 year ago—3 million tons versus 6 million tons 1 year ago. At the same time, the European Community wheat shipments have increased fairly substantially, in large part because some of those go to the U.S.S.R. as well. Of course, the export of U.S. agricultural products to the European Community is constrained by the imposition of the variable levy.

It is important, however, to point out that certain American agricultural products, such as soybeans, soybean meal, and soybean oil, enter the European Community with no variable levy associated. The European Community currently takes roughly 45 percent of all American soybeans and soybean meal. So our policies with regard to retaliation to the European Community should be formulated in such a fashion that they do not prompt a retaliation by the European Community against this currently unprotected export community, the soybean complex.

Any gain in the U.S. wheat exports in direct confrontation with France or the European Community may jeopardize the U.S. market for soybeans and soybean meal. We feel that it is incumbent and very essential for the United States to take a look at trade policies, policies with regard to agricultural trade that contain very aggressive trade promotion and financing programs, aimed not only at competing directly with the competitors such as the European Community, but our responsibility with regard to improving our own economic growth perspectives and that of the rest of the world. And, in essence, not just increasing our share of what may be a stagnant or declining world market for grains, but to try and enlarge that total world marketplace and the total pie, so to speak, with regard to world grain trade.

And particularly when it relates to dealings with the centrally planned economies in Eastern Europe and the Soviet Union, as well as some of the other less developed countries, we must be very aggressive in terms of our ability and willingness to enter into financing programs.

Now with regard to farm policy, and this will conclude my comments, I think that the current policy that we have now relates very specifically to concerns over the short-term budget constraints that are either in fact or perceived by the Department of Agriculture. The 1983 PIK program has been designed in such a fashion to pull maximum area out of production with minimum cash outlay or direct cash outlays. Another program may have cost more in terms of direct cash outlays, and may have been just as effective—or almost as effective, I should say—in reducing the total number of areas from production, but may not have resulted in the substantial flows of grain into the farmer-held reserve and CCC categories that we have seen in the early part of this year.

We are currently in a situation, particularly with regard to corn, where we have roughly 3.4 billion bushels of grain in stocks, and total holding stocks of 3.4 billion bushels, a record with regard to U.S. stock levels. But at the same time, virtually only 8 percent of that, roughly 260 million bushels, is in free market supplies.

We have seen over the past few weeks corn prices that are more reminiscent of periods of severe drought or supply curtailment rather than reflecting the position that we have the largest level of stocks on hand.

With that, my comments are concluded, Thank you, Senator.

[The prepared statement of Mr. Urbanchuk follows:]

PREPARED STATEMENT OF JOHN M. URBANCHUK

Mr. Chairman and members of the Committee, I appreciate the opportunity to appear before you and discuss the Economic Condition and Prospects of Agriculture and Rural Business. During the past several years the U.S. agricultural sector — which includes not only producers but the firms and industries that provide inputs and services to the farmer — has been substantially affected by a number of factors, including:

- A severe U.S. and world recession that has reduced the demand for agricultural products both here and abroad;
- High domestic interest rates which have adversely affected investment in, and demand for farm, equipment, machinery and structures, and has increased the costs of carrying inventories;
- Exceptionally good crops in the last three out of four crop years;
- Retaliation against unfair trade practices by the European Community;

The author wishes to thank Dr. Abner W. Womack, Associate Professor and Extension Economist at University of Missouri-Columbia for his advice and assistance in preparing this paper.

- A strong dollar which has placed U.S. agricultural exports at a competitive disadvantage in world markets;

- The 1980 Soviet grain embargo and subsequent hard line trading policy with the Soviet Union.

This combination of factors which essentially reflect oversupply and weak global demand, have resulted in an accumulation of grain stocks to unprecedented levels; weak farm level prices; and declines in net farm income, cash flow and profitability. Based on reduced marketings and weak prices we currently estimate 1982 farm cash receipts at $144 billion, only 0.3% above 1982 levels. Despite a significant increase in direct government payments attributable to the 1982/83 Reduced Acreage Program, net farm income for 1982 is estimated at $20.4 billion, almost 19% below year earlier levels.

This decline in net farm income and a continued deterioration in farm cash flow has resulted in a reduced demand and market for farm inputs and services. In addition to the farm supply industries, other firms that by, virtue of location depend on the health of the farm economy for their livelihood, have also experienced reduced markets.

Despite a recovery in the U.S. economy, lower interest rates and a vastly improved inflation rate, the near term outlook for the farm input supply industries is likely to remain bleak. The principal reason for this is the impact of the 1983 Payments-In-Kind (PIK) program. Record participation in the 1983 PIK will result in 82 million idled acres, approximately 65 million planted acres below the 1982 level. This reduction in planted area is expected to result in a 15% to 20% reduction in gross sales of major farm inputs, or a lost market of $5-7 billion to the farm input supply industry. The hardest hit industries will be farm equipment manufacturers and dealers and the fertilizer industry. Less equipment will be required on reduced area as well as substantially reduced fertilizer applications. The agricultural chemical industries and seed companies will also be adversely affected. It is important to note that not only will the manufacturers and suppliers of these inputs be affected, but so will the dealers and distributers of these inputs at the local level. In large measure these are the Cooperatives involved in procurement, supply and distribution of major inputs and services. In many cases these industries, firms and cooperatives have been among the most severely affected by the combination of economic factors discussed above.

Clearly the 1983 PIK program will go a long way toward reducing current excess stock levels and should result in a marked improvement in farm level prices and net farm income. The benefits of this program to most agricultural and rural businesses, however, are not likely to be felt until at least 1984.

The Outlook for the 1980's

Unfortunately for the U.S. farmer and the industries that support the American farmer the decade of the 1980's does not seem to be replicating the growth period of the 1970's. In fact our projections reveal growth markedly short of the pace maintained during the period from 1972 through 1980. Most of the growth in U.S. agriculture during the 1970's was associated with rapidly expanding foreign markets for agricultural commodities and products. The severity of the global recession, the debt and financing problems experienced by many developing countries and Centrally Planned Economies, and increased competition by other producers are expected to preclude a re-occurrance of this growth during the next ten years.

In our opinion the outlook for growth and development in U.S. agriculture over the next decade will depend on three major factors:

- Recovery and sustained growth in the U.S. and world economies;
- The ability of the U.S. to compete aggressively in world agricultural trade and at least maintain current shares of world markets;
- Future directions of domestic farm policy.

The Global Macroeconomic Environment

The U.S. Economic Outlook

The current Wharton forecast for the U.S. economy provides for a continuing recovery and positive growth through at least 1986. Real GNP growth of 3.1% in 1983 results largely from improvement in housing and consumer durables, offset by a strong deterioration in net exports.

Two factors will be responsible for holding the 1983 recovery rates below historical norms — high real interest rates and the strength of the dollar. While declining some 300 basis points in nominal terms from 1982 levels, long-term interest rates will decline only 140 basis points in real terms. Continued high real rates combined with low capacity utilization will act to keep investment from rebounding in 1983.

The strength of the dollar is expected to carry forward through 1983 and to continue to retard export growth. Exports of goods and sevices in real terms are expected to decline a further 4.5% in 1983, while imports will recovery apace with the U.S. economy as a whole at 2.9%. When the dollar weakens in 1984 and 1985, net exports will be a source of growth rather than a retardant.

Annual GNP growth is expected to peak at 5.3% in 1984 as a result of the pickup in residential construction, recovery in consumer durables, and an increase in real net exports. With some slowing of residential investment, growth moderates to 4.4% in 1985.

After three strong years, a growth pause is projected for 1986, when GNP will increase by only 0.8%. From 1987 to the end of the decade, growth is near the 3.0% range, with the exception of a second growth pause of 0.6% in 1990.

The outlook for interest rates will continue to be highly dependent on the cause of monetary policy. We have assumed that monetary policy in annual average terms will remain accomodated during 1983 and be tightened somewhat in 1984 and 1985, diving up short-term interest rates. After 1985 we assume that M-2 growth generally follows nominal GNP growth but with a slight lag. This monetary growth partly implies that the Fed has a looser policy during slow-growth years, helping short-term interest rates to fall in the growth pauses of 1986 and 1990.

In summary our outlook for the U.S. economy is generally favorable for a recovery and sustained growth in domestic agricultural demand. Improved income prospects, lower interest rates and moderate increases in inflation rates should provide for growth in the U.S. livestock sector and support increases in feed demand over most of the decade. From a farm income perspective, these factors should result in moderate increases in farm production expenses during the decade.

The World Economic Outlook

Our medium-term outlook for the World economy contains a global recovery following that of the United States but somewhat less strong. Several factors underly our expectation of improved world growth over the next five years. These include a significant reduction in the level of crude petroleum prices, strong U.S. growth, and prospects for a weaker U.S. dollar through 1985. In part these will be offset by a continuation of overhanging debt servicing obligations and persistent current account deficits in many of the LDC's, and austerity programs instituted in several European countries, noteably France.

We expect that world GDP growth will average 2.9% over the 1983 to 1988 period. Growth in the OECD countries is projected at 2.8%, the developing countries at 2.7% and the Centrally Planned Economies at 3.1%.

The world outlook will be characterized by somewhat lower inflation, higher unemployment in Europe and Japan, and persistent current-account disequilibium for the LDC's. We expect that this will remain a relatively uncomfortable world environment wherein the reinforced tendencies to economic autarky and the sense of being on the knife-edge of a world financial crisis will lower expectation for growth and hence, the motivation for investment. Many government policies will be driven to inward looking solutions aimed at containing inflation and reducing balance-of-payments deficits, while retaining export competitiveness in an attempt to retard unemployment. In the main, these efforts will be futile as most countries pursue the same adjustment goals of external and internal balance via restrictive policies.

From an agriculture point of view the improved outlook for growth in the OECD countries is expected to support a turnaround and growth in the European and Japanese livestock sectors prompting an increase in grain demand for feed. The LDCs and CPEs will continue to struggle with debt and financing problems that are expected to retard growth in their demand for grain. We expect that import requirements will continue to be dictated by the need to conserve hard currency and improve balance of payments.

The Role of the U.S. in World Agricultural Markets

The United States is a major producer and exporter of virtually all temperate agricultural products. Agricultural exports account for about 20% of the total value of U.S. merchandise exports. In addition, agriculture has been one of the few components of the overall trade balance to register consistent surpluses. Thus the recent decline in U.S. agricultural exports has a significant impact on the overall U.S. balance of trade and balance of payments.

Increased competition from other producers who heavily subsidize exports in an environment of weak world demand for agricultural products — in addition to the impact of the variable levy that restricts imports to the European Community — has given rise to one of the most pressing current problems in trade policy: the failure of the US and EC to reach agreement on agricultural subsidies and protectionism.

The United States has consistently enjoyed a positive balance of trade in agricultural products. In the fiscal year ended in September 1982, the value of U.S. agricultural exports totaled $39.1 billion, or 18% of total merchandise exports. Agricultural imports were $15.4 billion (6% of total imports) providing a net positive balance of $23.7 billion. During the same period the balance of nonagricultural trade was negative $57.2 billion.

Grains, oilseeds, and oilseed products, which dominate U.S. agricultural exports in value terms, represented 65.5% of exports for Fiscal Year 1982. While animals and animal products were the third largest export category at $4.1 billion, exports of dairy products and meats accounted for only a third of these exports with the majority made up by exports of live animals and animal byproducts.

On a regional basis Western Europe and East and Southeast Asia are the leading importers of U.S. agricultural products. The 10 countries of the European Economic Community (EC-10) account for almost 60% of U.S. agricultural exports to Western Europe. In terms of individual markets, 10 countries led by Japan, the Netherlands and the Soviet Union accounted for almost 60% of total U.S. exports in 1982.

Although it may seem odd that a country as small as the Netherlands would be the second largest importer of U.S. agricultural products, it should be noted that the Netherlands is the major port of entry for Europe. Many commodities are processed in or transshipped through the Netherlands to other points in Europe and the Soviet Union.

Grains and oilseeds are the most important U.S. agricultural exports. The United States is the world's largest producer and exporter of coarse grains and soybeans, and the number-two producer — after the Soviet Union — of wheat. From a global point of view, the United States:

- produces 16% of total world wheat, and supplies 41.5% of world wheat exports;
- produces about one-third of the world coarse grain supply and about 62% of world exports; and
- accounts for almost two-thirds of world soybean production and almost 90% of world exports.

The U.S. Share of world production and trade of coarse grains and soybeans has been relatively stable over the past several years, and is unlikely to change dramatically during the next five years.

The situation for wheat is somewhat different. While U.S. wheat production as a percent of the world total has increased substantially over the past five years, production in competing countries such as France (the largest producer in the EC), Canada and Argentina has also increased. The U.S. share of world wheat exports, which peaked at almost 50% in 1973, has declined to an estimated 41.5% for 1983.

The most significant grains in both volume and share of world wheat trade during the 1970s have been made by Argentina and the EC-10. Argentina has significantly increased both production and exports of wheat over the past 10 years, raising its share of world wheat trade from 4.6% in 1978 to an estimated 8.0% this year. The EC-10's share of total world wheat trade has increased from 12.2% in 1978 to an estimated 16.5% this year; during the 1970s the EC has moved from the position of net wheat importer to that of net exporter. Over the past year France has been particularly aggressive in pursuing long-term grain trade agreements, such as the one signed with the Soviet Union in the fall of 1982, and has increased the use of export subsidies in order to promote exports and increase market share.

The issue of Soviet grain trade and the trade dispute with the EC are likely to have a substantial impact on U.S. agricultural exports over the next several years. The Soviets have been very aggressive in identifying alternative sources of grain since the 1980 embargo, and in signing long term grain trade agreements. This permits the Soviets considerable flexibility in sourcing grain and exerting political pressure on the U.S. We anticipate that a new Long-Term Grain Trade Agreement between the US and USSR will be successfully negotiated and that the agreement will be a replica of the current agreement under extension.

Our projections for Soviet agricultural performance indicates that the USSR will experience increases in crop production over the next ten years, although these gains will still remain below plan target levels. In addition to increased output the Soviets are likely to continue to improve feeding efficiencies that will permit more effective use of grain, thereby reducing import requirements. The Soviets are also likely, for balance of payments and hard currency availability, to continue to reduce dependence on imports of western grain. As a result we project Soviet grain imports to decline from around 35 million metric tonnes this year to 20 to 25 million tonnes by 1992.

Given this reduction in import requirements and the willingness of the Soviets to view the U.S. as a residual supplier, it is going to be very difficult over the long run to get the Soviets to purchase much more than the minimum amount called for under any long term grain trade agreement.

The current dispute over trade subsidies and protectionism with the European Community could be equally detrimental in the long run. The EC-10 for example, imports about 45 percent of U.S. exports of soybeans and meal and about 15 percent of U.S. coarse grains. The current controversy is primarily directed towards wheat flour subsidies by France, the EC's leading agricultural producer. The EC-10 share of world wheat trade is about 16.5% (15.5 million tonnes) compared with the U.S. share of 41% (38 million tonnes).

Any gain in U.S. wheat exports via direct confrontation with the French will in all probability not exceed the net loss to the Soviet Union. The 6 million metric tonnes of wheat imported by the Soviets from the U.S. in 1981/82 is very likely to decline to 3 million metric tonnes in 1982/83. The risk of gaining back 5 to 7 million metric tonnes from the French export market may jeopardize the lucrative trade market for U.S. soybeans, soybean meal and coarse grains.

The positions taken with the Soviets and the potential for a trade war with the European Community may lead to longer run repercussions that will, in total, be negative to U.S. trade. A retaliation by Western Europe that precludes free trade of soybeans and soybean products could further erode away this vital export market. Finally, subsidizing

U.S. wheat exports is a net negative strategy for the U.S. treasury. Our export volume is over twice the European level of exports, requiring substantially greater subsidy exposure plus the likelihood of decreasing world prices. The latter factor could enhance the European position since levies on imports would increase, providing greater revenues for their subsidization program.

The major question then that has to be asked with regard to the area of agricultural exports is are we taking sufficient and adequate steps to increase the U.S. share of world trade.

We feel that a major policy intiative of the 1980's must be directed toward aggressive agricultural trade promotion, including financing. In addition a more pragmatic approach to Soviet trade that incorporates the idea that they are as important a market for us as we are a supplier to them is essential to ensure a stable base for export growth.

The Future Direction of Farm Policy

The third major factor that will greatly impact on the growth and development of the U.S. agriculture sector is the structure and implementation of domestic farm policy.

The major policy emphasis currently is on the 1983 PIK program. As was indicated earlier we expect that PIK will reduce stocks and boost farm prices and net income. However by the end of the 1983 crop season stocks of wheat and corn are projected to still be near record levels. As a result we expect that supply control policies are likely to remain the principal policy focus by USDA for the next several years.

The momentum seems to be building [illegible] a PIK program for the 1984/85 crop year. Part of this momentum is due to the apparent popularity of the PIK program with farmers reflected by record participation with 82 million acres of farm land idled. This level of participation will help reduce burdensome stocks and begin to move American agriculture into a more profitable zone. However, it is apparent that even with this reduction in acreage, an additional strong acreage control program will be necessary next year. PIK is certainly an option, but before this strategy is endorsed we feel it is appropriate to examine the consequences of the 1982 Reduced Acreage Program; the possible implications for the agricultural sector in 1983/84 of the current PIK, and issues associated with management of the current farm program implemented in 1981.

The 1982 Reduced Acreage Program

Despite the low participation in the 1982 Reduced Acreage Program, this program will have serious consequences for sometime to come. Limited up front payments to farmers for land diversion plus a lucrative "no lid" constraint on reserve utilization has been doubly negative. Our analysis indicated that the RAP of 1982 was not strong enough to attract sufficient land out of production. And furthermore we projected that stock accumulation could result in a serious situation for the USDA requiring measures that would be substantially more expensive than up-front payments. The option selected by the USDA in 1982 seems to have been very much in line with a requirement to protecting near term government budget expenditures.

This option has therefore contributed to the current excess supply situation. It also contains serious longer run implications . . . in a period of slack growth with excess supply potential, strong acreage control programs are esential. But short term budget constraints can jeopardize this necessary option placing U.S. agriculture on an excess supply course that continually builds stocks and runs farm prices at or near loan rate levels.

An additional component of the 1982 program has significantly impacted the current market environment. The "no lid" option to reserves with a high reserve loan rate has contributed to the current tight free market situation for corn. As a result corn prices have moved from a low trading range of $2.25 per bushel in the fall of 1982 to around $3.00 currently. This comes at a time of record high supplies with sluggish domestic and foreign demand. As a result we have a situation where corn is selling at market prices experienced only during the shortage or drought periods. The livestock industry is reeling from this sudden shock and the USDA has lost one of the major factors supporting the implementation of the PIK program — that U.S. prices would not increase, substantially, and U.S. market shares of world trade would not be affected.

Program management has become a critical issue. It is not clear that the administration has the necessary leverage to run the current farm program in a political environment of tight budget constraints. Without sufficient funds to restrain acreage expansion, we may find ourselves faced with the necessity of "bail out" programs similar to PIK on a fairly regular basis. In evaluating the total ramifications of the PIK program it is not clear that all will be rosy with this alternative.

Implications of the 1983/84 PIK Program

In supporting the 1983 PIK program the Administration has taken the position that:

- Stocks will be reduced.

- Government expenditures will be reduced.
- Reasonable stocks will be maintained without significantly raising market prices.
- No deterioration will occur in the U.S. trade share position.
- The program will prevent the eventual government ownership of farmer-held reserves that may be defaulted at the end of the contract period.

Our analysis tends to support only part of the above contentions. It is apparent that the level of participation and diverted acreage will significantly reduce stocks. However, these levels are projected to be in excess of requirements normally associated with a balanced supply-demand situation. Also, it is very likely that market prices will be on the low side of the price band between the loan and release level. This will result from several forces . . . increased yields on planted area with corresponding a high PIK payback and moderate strength in domestic and export demand.

Also the amount of idled land will result in an improvement in farm income. Although prices are not projected to increase, the reduction in input costs will be reduced by $5 to 7 billion dollars. Since payback grain offsets a large share of the crop area then it is very likely that the net farm income situation will begin to improve, increasing 15.5% to $23.6 billion in 1983 and an additional 20% to $28.2 billion in 1984.

This improvement for the farmer is associated, however, with an expected record cost to the government. The PIK component alone could exceed $8 billion if the commodities are valued at outstanding loan rates and the total cost of the crops component of the program is likely to be around $15 billion. These costs may not be entirely visible in the near term, however the slack will have to be taken up down the road. Government outlays for reserve loans, both CCC and farmer held will be forgiven . . . these costs will reappear when CCC opearting funds are replenished.

One argument for government saving is that the present value of the reserves are at or near zero. Grain defaulted at the end of the 1981 and 1982 contracts would be more expensive to deal with than simply releasing back to the farmer. This argument is valid only if supplies cannot be maintained. For example, stronger acreage control programs could reduce supplies to the extent that reserve release prices would be penetrated. In this event reserve loans would have been paid back . . . a very attractive component of the farmer held reserve program. A more sobering part of the Administration's argument is that the American farming community has entered an era where acreage cannot be maintained to balance expected demand. This certainly may be the case if the administration cannot get necessary up front monies for land control.

An additional negative side of the PIK program has been the direct impact on the input supply industry that is very critical to U.S. agriculture. With 82 million idled acres and approximately 65 million acres below 1982 levels, it is likely that gross sales of major supplies will be reduced by 15% to 20% or $5 to 7 billion. The hardest hit will be farm equipment manufacturers and dealers, and the fertilizer industry.

Management of the Current Farm Program

The backbone of the 1981 Farm Bill is a reserve stock program. In analyzing the management of this program from the USDA side it is apparent that several factors must be maintained in unison for appropriate operation. These include the following indicators:

- Price band for market prices, between loan and release level.
- Reserve stock objective to maintain prices in the band a large percent of the time.
- Forward price objective that serves as a target for future acreage reduction.

The Administration gets poor marks on maintaining a cohesive balance around these reserve stock rules. Although the price bands are clearly identified, it is not evident that some average stock objective is in focus. Also land control programs of the type implemented in 1982 tend to indicate a forward price objective which appears to be the loan rate. If this is the case then that's where we're likely to be over the long haul. Similarly, placing a no lid option on the 1982 program sets the stage for over-use, a situation that has occurred since January. The reserve program will not be efficient in operation unless stocks are removed in periods of excess supplies and released in periods of shortages. The reverse pattern is occuring. The government will bear the additional cost for this disparity. This artificial price rise caused by the operation of the reserve program is a signal to the market for expanded production while livestock producers are experiencing dramatic increases in feed prices.

Additional negative factors will be associated with the final cost of the PIK program. Our analysis indicates that a program containing a stronger paid diversion component is much less expensive in the long run than a program of the size and magnitude of PIK. This point must be rectified in the near future otherwise farm program operation will be jeopardized.

Finally, the focus on trade issues are also contradictory. While attempting to expand exports we are embarking on a course that contains the potential for newer longer term damage. A hard line trade policy with the Soviets and trade retaliation with one of our largest importers over a small percentage of the wheat export market is difficult to support.

The Future Direction of Farm Policy

Two things are clear from our evaluation of the PIK program, given the current outlook. First reserves will be reduced, however, projected levels for the end of 1983/84 crop year will exceed levels necessary for maintaining a balanced farm program. Second, given current domestic and foreign demand projections it is very likely that a strong acreage control program will be necessary for 1984/85.

The positive factors associated with another PIK program is the potential for strong participation with the possibility of removing excessive reserves that currently overhang the market with price depressing effects. Also the PIK option contains less constraints for participation, given payment limitations associated with diversion payment strategies. Also repayment in kind prevents excessive upside price movements providing a smooth transition from the current excess supply state.

The negative side of PIK is the potential longer term budget exposure and the possibility of subjecting the agricultural input supply industry to a fourth year of price pressure. Our analysis indicates that over the longer term a strong paid diversion strategy will be economically more efficient than the PIK option. Although higher up-front payments are necessary for reductions in area planted, potential for loan repayment more than offsets this diversion cost.

Finally, the notion that loan applications have been made under previous budgets and can therefore be written off as an expense already incurred contains the fallacy of the bottomless pit. Eventually CCC budgets have to be replenished. It is likely that this replenishing will take place as the new 1985 Farm Bill unfolds. Discovery at that time of previous unaccounted program cost will be negative to the entire process of hammering out a new farm bill that is more meaningful in the current environment. This may be the greatest expense of the PIK program. Consumers could easily point to the vast expenditures under PIK, creating a very strong case against supports necessary in running a balanced program in the future.

Since it is very likely that agriculture will remain in an excess supply situation through mid-decade then supply controls will be necessary in keeping an agriculture industry aligned around the prevailing demand in both domestic and foreign markets. Without this option the Secretary of Agriculture will be forced into areas that will be less efficient in terms of program management — the 1982 Reduced Acreage program with a strong reserve incentive for example.

Senator ABDNOR. Thank you very kindly. We are looking forward to asking you some questions. But before we do, we'll call on Brady J. Deaton.

We certainly welcome you to our committee and appreciate your attendance, Mr. Deaton, please proceed any way you care to. I can assure you that your prepared statement, as Mr. Urbanchuk's, will be made a part of the record.

STATEMENT OF BRADY J. DEATON, ASSOCIATE PROFESSOR, DEPARTMENT OF AGRICULTURAL ECONOMICS, VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY, BLACKSBURG, VA.

Mr. DEATON. Thank you, Mr. Chairman. I appreciate the opportunity to be here today and to share with you my comments regarding the effects of agricultural policy on agricultural and rural-based businesses in rural America.

The thrust of my comments are consistent, I think, with the purpose of these hearings, and that is to attempt to design a forward-looking policy for rural areas that incorporates the effects of agriculture on rural businesses and that make the rural sector of our economy one of the leading sectors of economic recovery, a full participant in the kind of economic recovery that we hope to see.

In that context, the effects of agricultural policy on rural-based business an industry can only be evaluated, I believe, within the context of broader economic forces that affect the well-being of rural residents. These are international and national in scope, as Mr. Urbanchuk has clearly pointed out.

With the growing internationalization of the U.S. agricultural economy, particularly, and the general economy, we have to focus on those broader issues if we're going to evaluate their effects on economic recovery in the farm sector and in the small communities in rural America that depend on that farm sector.

I would emphasize from the outset that rural America is a very diverse place. That's certainly nothing new to you and the members of the Joint Economic Committee, I'm sure. But I think we have to remember that, that agricultural policy affects rural communities in the Midwest and in the Great Plains in a different way than it may affect communities in the Northeast and the Southeast, where the agricultural sectors are a relatively smaller proportion of the total rural economy.

And it's toward the broader set of interrelationships between the farm sector and rural businesses that I want the focus of my comments to be directed.

We have to remember that economic policy has implications for people, implications for places, and implications for commodities, particularly with regards to agricultural policy. And it's the interrelationship among all of these that we have to evaluate in order to formulate an effective public policy toward agriculture.

So it's the space implications or the community implications that I think are so critical.

In your opening remarks, you referred to the problems of the family farmer and the rural communities that are so dependent on farming. I think we cannot emphasize too much the importance of the family farm idea to the social well-being of America, and particularly of our rural communities.

I know that's a romantic, glamorous kind of concept, but I would submit that it has very important implications, politically, socially, and still economically for the strength of rural America and for the entire Nation.

Farmers were urged to go all out and produce during the 1970's. The sky was the limit, we were told. Farmers responded in the way that they have responded historically. The result, of course, is that today many of them face the specter of losing their farms. We see farm foreclosures and oftentimes violent protests against that on our television sets every day, and it touches a deep emotional cord in all of us, because all of us, to some extent, as your comments also pointed out, have a stake in what happens on our farms and in our rural communities.

Clearly, I think this points to a set of adjustment problems that we have to contend with. The market forces that are stemming from international and national economic policy are harsh taskmasters at times. We have to decide, as intelligent, rational human beings making policy, how we want to see those effects take place in rural America, how they should affect our commodities, the prices, and the loan rates in agriculture, as we evaluate their implications for the agricultural supply industries, the markets that Mr. Urbanchuk talked about, and also for the rural communities on which they are dependent.

I do that, I think it's important to look at some broader redistribution of economic activity that has been occurring in rural America, because so much of the strength of rural communities is now dependent on broader economic forces, as I have been stating. And what we have heard termed the population turnaround of the 1970's is an example, I think, of how complex many of our rural economies are.

We have seen in the last 15 years a major redistribution of manufacturing activity away from the Northeast and Midwestern States to the Southeast, Southwest and West. Those changes are important for many rural communities and particularly in the

Northeast and Southeastern United States. The nonfarm sector is a very vital part of those rural economies. Clearly, it is interrelated with the agricultural economy. But its importance cannot be overemphasized because it contributes a substantial proportion of even farm family income.

For the Nation as a whole, 64 percent of family income for farm families is derived from off the farm. So if we are formulating agricultural policy, we have to also consider the effects of that policy as it affects family net income in the context of the contribution of the nonfarm sector. Much of that nonfarm sector, of course, stems from agriculturally related industries. The service sectors of our economy as a whole are, of course, in the forefront and are leading the way in terms of proportion of employment, even within our smaller rural communities.

As this has occurred, this redistribution of manufacturing activity, we have seen growing international economic forces impinging on our rural economy as the economy has been opened up. The importance of that for our capital markets should be emphasized. We have had a growing interrelationship between even the smallest segment of our capital market at the small rural community level with international market forces. As the international sector has become more open, we have had a simultaneous deregulation of our banking industries here within the United States. That deregulation process was based on the premise that it would make the capital markets more efficient in small towns and rural areas.

But because of the growing uncertainly, it has also led to a reduction in long-term lending in many rural banks, particularly toward the farm sector, and we are not at all sure at this time whether the benefits of this deregulation process are going to be positive or negative for the small towns of America.

I think it behooves us to take a hard look at this issue over the next few years as the deregulation process continues to determine whether it is for the good or for the bad in terms of the efficiency of our rural economies and particularly the agricultural and agribusiness sector.

Also, during this period, our Nation achieved a degree of balanced economic growth due to a range of public programs that stimulated investments in infrastructure through the Economic Development Administration, the Farmers Home Administration, Small Business Administration, and the various regional commissions such as the Appalachian Regional Commission.

Those programs, combined with increased transfer payments for low-income people, led to significant improvements in the economic well-being of many of our rural citizens. During the decade of the 1960's, alone, we cut the poverty rate in half. I don't think that we can fail to continue to evaluate the effects of our policies on the low-income sector and particularly on the marginal farm sector. We still have a concentration in many parts of this country of small, struggling farm sizes, small-farm operations almost exclusively dependent on farm income that have not reaped the benefit of the nonfarm growth in our rural economies. And we have a particular adjustment problem, I believe, with that sector of our rural economy and it behooves us to evaluate that carefully as we formulate new policy toward commodities, and toward commercial agricultural policy.

A major part of that population turnaround and of the movement of industry into rural areas, in addition to the public policy measures that have led the way, has been what I would call the concept of an efficiency wage. This is a notion of the increased productivity combined with the relatively lower wages that workers are willing to accept to live in the smaller towns and rural areas of our country.

The evidence on that is fairly overwhelming, I believe, but it points to a new economic component that we should focus on in our analysis.

Senator ABDNOR. Mr. Deaton, I'm going to have you continue. Mr. Tosterud will carry on and I'll get back just as quick as I can and then we'll go without interruption.

Mr. DEATON. Fine.

Senator ABDNOR. So if I step out here, don't be surprised.

Mr. DEATON. That's fine. Thank you.

Senator ABDNOR. You go right ahead.

Mr. DEATON. The importance of the concept of efficiency wage stems from this attraction that people have for living in smaller towns and rural areas. The so-called community attributes of safer streets, less hassle getting to work, to and from work, ability to live in a rural area and commute into the city, and the various recreational and clean air amenities that we have for a long time associated with rural areas we find turn out to be more than just a passing fancy. They are a very important ingredient of the redistribution of economic activity that is occurring in this country.

And as incomes in this country have grown, people have had the choice of leaving the urban areas, where they have faced the problems of those urban areas which are so familiar to us, particularly in the 1960's, and have now moved back into the rural areas.

So we have a new economic force at work. That economic force is related to the significant process of mechanization that occurred during the 1950's due to the agricultural programs that we had that reduce uncertainty and made it more feasible for farmers to mechanize. This process led to a significant displacement of rural workers and rural farm operators. But the existence of the commodity programs certainly made that process a more stable adjustment for a growing economy than would have occurred in the absence of those farm programs.

And I think that that force of agricultural policy must still be reckoned with as we look toward continued adjustment in the rural sector.

In terms of policy, then, specifically for the well-being of rural communities, I want to emphasize in my comments the importance of people-oriented policies. We have to focus on what some economists have called the human capital factor, because in the industrial revolution that has passed and the agricultural transformation that has essentially passed, we have now moved into what many are calling an information revolution. That information revolution requires skills, and knowledge, and a much more flexible process than has ever occurred before. And if we are going to continue to be concerned about the adjustment of rural communities, we have to reckon with the human factor and place more emphasis on upgrading the quality of education, the training and retraining of skills that is going to be required as these small farms and medium-sized farms continue to be affected by the market forces.

We are probably going to see continued adjustment, to some extent, out of the farm sector, but probably not out of the rural communities.

While we cannot lose sight of the importance of rural infrastructure for job creation and for the health and well-being of rural economies, I would like to see relatively more emphasis placed on the human capital side. I think that that will provide more of a leading thrust as we try to draw on new technologies, incorporate those new technologies into the business sector that adds value to the agricultural products and the raw material products that are being produced in rural America.

I could easily see this becoming a real vanguard of future economic growth with, as I said before, the rural-based business and industry being a leading sector in that recovery.

With those comments, I will conclude my contribution. Thank you.

[The prepared statement of Mr. Deaton follows:]

PREPARED STATEMENT OF BRADY J. DEATON [*][**]

The future vitality of rural-based business and industry can be promoted by economic policies designed to achieve balanced economic growth. Agricultural policy has always been an important factor in the growth of non-farm business and industry, but the interrelationships have not been explicitly recognized and drawn into agricultural policy debate. The purpose of my statement is to identify some of these most important interrelationships and to emphasize the significance of their cultural, social, economic, and political dimensions.

This inquiry has led to five principal conclusions:

- The organic interrelationships between agriculture and the business and service sectors of small towns and rural communities provide continuing economic and social strength to our society.
- Agricultural policy affects these interrelationships in different ways, depending on the composition of the local economy and the structure and diversity of local agricultural production.
- Increasingly, however, agriculture and its business interrelationships are shaped by national and international economic forces.

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[*] Testimony presented before the Joint Economic Committee of the U.S. Congress, June 16, 1983, Washington, D.C.

[**] Professor, Department of Agricultural Economics, Virginia Polytechnic Institute and State University, Blacksburg. The author benefited from discussion of this topic with J. Paxton Marshall, Virginia Polytechnic Institute and State University, S.D. Mundy, University of Tennessee and D. Otto, Iowa State University, and from suggestions made by Jean Sussman and Tom Stinson, University of Minnesota who read an earlier draft.

- More geographic balance in population distribution, reduced levels of poverty, and expanded economic opportunity were achieved in the 1960's and 70's. These hard-won gains now appear to be threatened by growing economic instability and reduced public support for rural infrastructure.
- Small business development and value-added enterprises linked to farming could be leading sectors contributing to renewed economic strength in small towns and rural communities. Public support for venture capital and entrepreneurship may be required to achieve this objective.
- The information revolution currently shaping the sources and distribution of economic change in both rural and urban communities calls for renewed emphasis on continuing education and manpower training.
- The research and extension missions of our land grant colleges and universities should be strengthened to serve the broader needs of the business and public service sectors of rural communities.

Assumptions and Approach

I share Nobel Laureate Simon Kuznets' assumption that "a major function of modern sovereign government is to help channel social and political adjustments to economic growth, to modify old and create new institutional patterns that would facilitate growth while limiting its inequitable effects".[1/] The burden of this assumption is that we

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[1/] Simon Kuznets, "Two Centuries of Economic Growth: Reflections on U.S. Experience, American Economic Review, Vol. 67, No. 1 (February 1977), p. 8.

understand the relationships between public policy and economic structure in order to devise more appropriate strategies. Toward this end, my discussion is organized around the following issues: (1) the relationship between agricultural policy and rural-based business, (2) the effects of public policy on the structure of the rural economy, and (3) the implications of these changes for future agricultural policy.

Epochs of American economic history are marked by distinguished scientific and technological achievements marred only by the social costs of unplanned and unforseeable side effects. The industrial revolution of the past century and the agricultural transformation of the post-WW II period produced both benefits and costs as they shaped our settlement patterns and our economic opportunities. The current sweeping changes brought about by marked advances in biological engineering and information systems threaten to create even greater uncertainty for the future of small towns and rural communities. Our family farms and rural-based businesses should not have to bear the brunt of the inevitable economic adjustments that may be required.

The effects of agricultural policy on rural-based business and industry can be evaluated only within the context of broader economic forces impinging on the well-being of rural residents. With the growing internationalization of the U.S. economy, particularly the agricultural sector, new policy approaches are needed that not only sustain the benefits of past structural changes in the rural economy, but which simultaneously serve to revitalize rural communities making them full partners in a national economic recovery. I seriously doubt whether this can be achieved in the absence of programs designed to simultaneously alleviate the most serious problems of underdevelopment and poverty which still plague too many rural citizens.

Agricultural Policy and Rural-Based Businesses

Farm programs of price and income supports always have been based on an overriding concern for commercial farmers -- to enable them to survive the Great Depression of the 1930's, to stimulate increased output during WW II, to protect them from a sharp decline in the post-war price level, and to protect income levels threatened by the chronic problem of excess production capacity for most of the period since 1950.

Except for a brief period in the 1970's, post-war public policy has attempted to reduce the level of agricultural output. Only minimal efforts were made to alleviate the most serious problems of resource adjustment as agricultural workers and farm operators were forced off the farms. These problems were most severe during the 1950's as rapid technological change offset all efforts to stabilize the farm sector.

Farm programs in the 1950's & 60's created sufficient stability of expected income to provide incentives for the rapid adoption of cost-saving machinery. In turn, labor was displaced from the farm sector in greater numbers than would have occurred in the absence of farm programs. The rapid technological changes created a cost-reducing treadmill that forced the more inefficient farmers out of business. Smaller sized farms were particularly affected by these changes, although their rate of demise may have been slower under the minimal income floors provided by price and income support programs.

With the current food surplus, daily news stories of farm foreclosures and sometimes violent protests to prevent them are disconcerting to a broad spectrum of the American public. Feelings of concern for the family farmer touch a sensitive emotional chord and reflect widely shared values. As recently as the early 1970's, farmers were told to go all out and produce to their maximum potential. Having responded, many of them now face the spectre of losing their farms. As a further consequence, the sheer survival of some small towns in the predominant agricultural states appears to be threatened as the demand for farm inputs is sharply curtailed. Reduced net farm income will not support the clothing and furniture stores, the service stations, movie theaters, restaurants, and other businesses on which small towns depend.

Generally speaking, the exodus from the farms was probably more orderly and planned because of the farm programs. Most of the adjustment would have occurred in any event. Strong kinship ties in urban centers and income floors provided by commodity programs enabled rural residents to search for better jobs and higher incomes at a more leisurely pace. The implication that programs geared to commodities would alleviate low income conditions among a sizeable portion of the farm sector was a misleading aspect of the policy debate.

Consumers at home and abroad were the principal beneficiaries of this era of cheap food. Low income consumers benefited even more than average since they spend a disproportionately high amount of their income on food. Other businesses realized increasing sales as a relatively higher percentage of the consumer dollar was spent on non-food products. In this respect, our food stamp program has been a major blesssing for recipients, farmers, and the business sector.

Agribusiness firms thrived under the relatively stable demand for their products. In the aggregate, they probably realized greater sales than would have occurred in the absence of support programs. Acreage reductions due to soil bank, conservation and land retirement programs resulted in even more intensive applications of chemicals, perhaps with deleterious environmental consequences. Essentially though, both the relative stability of farm income which increased the rate of mechanization and the greater intensity of applications of fertilizers, seeds, pesticides, and insecticides led to a thriving agribusiness sector. Major uncertainties for agribusiness arose in the post-1970 period of growing instability of the agricultural economy.

Non-farm related businesses in rural America did not enjoy significant growth over the 1940-1970 period, but many changes occured due to technology, marketing, economies of scale, and competitive factors unique to each sector of the economy. In spite of the massive exodus of people from rural communities and a 70 percent decline in farm employment, the total population of rural communities and small towns remained more or less constant.[1/] To some extent then, increased employment in farm related businesses of both the private and public sector helped offset reduced employment on the farm.

During this period, the business sector of rural communities realized a degree of benefit from the stable flow of funds derived from commodity program. For both agriculturally linked and consumer oriented businesses, orderly adjustments were possible. In the absence of commodity programs, farmers would have been forced to maintain a higher liquidity position and lower their purchases of farm inputs and consumer durables. While this may have produced a higher rate of personal savings in local financial institutions, the lack of farm-driven demand would have led to an even greater than normal outflow of private capital from rural to urban centers.

I point to these interrelationships in order to provide a better understanding of contemporary forces in the rural economy, particularly the consequences of growing instability in agriculture and the general economy since 1970. Current events have their roots in both the positive and negative consequences of post-war agricultural policy. The psychological importance of private investments to sustain the business sectors of rural towns should not be

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1/See Max Jordan and Tom Hady, "Agriculture and the Changing Structure of the Rural Economy", in Structural Issues of American Agriculture, U.S. Department of Agriculture, ESC , Agr. Econ. Report 438, November 1979, Washington, D.C., p. 281.

underestimated. The multiplier effects of these investments are a source of pride and economic stability.

The dislocation of such large numbers of rural workers during the 1950's undoubtedly contributed to the urban crises of the 1960's, the growing disaffection with life in our major metropolitan areas, and the so called "population turnaround" of the 1970's. The rural-urban migration process was related directly to the mechanization of American agriculture. In turn, the urban-to-rural movement of people and industry of the 1970's was made easier to some degree by the residual strength of the rural economy which had been buoyed up by a combination of farm commodity programs and transfer payments to the disproportionate numbers of the rural poor and elderly. In the next section, the dimensions of these changes will be explored and some important underlying causal forces identified.

Structural Changes in the Rural Economy

A wave of new manufacturing locations and expansion swept across rural America in the 1960's and early 1970's, particularly in the South and West, defying earlier predictions that only urban growth centers could support such activity. These changes require a closer examination in order to avoid similarly incorrect predictions about likely future changes. Some observers feel that this new source of rural economic growth will be a panacea for low incomes, inadequate public services, and sub-standard living conditions that have plagued rural communities. Still others fear rural industrialization as a threat to the last vestiges of perceived moral strength and social stability that have anchored agrarian virtues against the disorder and rootlessness associated with urban life. Both views are overly simplistic and potentially misleading when used to shape public policy.

The decentralization of manufacturing was accentuated in the 1960's in part due to the abundance of relatively cheaper labor in small towns and rural areas. An unexpectedly high elasticity of labor supply has kept wages relatively low in many rural areas. The labor supply elasticity is increased by the growing participation of women in the work force, by return migrants from urban centers, and by expanding commuter fields made possible by improved transportation and communication systems.

Three major trends characterized non-farm employment in the 1970's: (1) a general decline in non-farm goods production relative to service-producing industries, (2) a decline in employment growth rates in metropolitan areas, especially in the larger central cities of the upper Midwest and Northeast, and (3) a relative shift in population growth and general economic activity toward smaller metropolitan and rural areas, especially in the South and Southwest. With the multiplier effect of manufacturing, agriculture, forestry, recreation, and retirement communities, the service-producing sector of non-metropolitan counties grew by 42.4 percent during the 1970's, substantially more than the 33.2 percent service sector growth of metropolitan counties (Table 1). Only in the South did metropolitan service sector growth exceed non-metro service growth (46.3 v. 44.5), although these figures are above the respective national averages.[1/] Over 600,000 manufacturing jobs were added in non-metropolitan areas of the Southeast alone between 1962 and 1972, roughly twice the increase in metropolitan areas, accounting for one-third of total U.S.

[1/] For an expanded discussion of these trends and their implications, see Eldon D. Smith and Brady J. Deaton, "The Changing Industrial Structure of the Rural Economy", paper prepared for National Extension Manpower Workshop, Silver Spring, Maryland, May 19, 1980.

Table 1. Rates of Change in Nonfarm Wage and Salary Employment 1970-79, by Major Industry Class and Region[1]

Area and Industry Group	U.S. (Percent)	Northeast (Percent)	North Central (Percent)	South (Percent)	West (Percent)
Total (All Classes and Sizes of Place)[2]	+25.1	+ 7.0	+18.6	+37.0	+44.5
Goods-producing	+ 9.2	-11.0	+ 3.7	+23.5	+34.0
Service-producing	+35.4	+19.0	+29.3	+45.7	+50.6
Metro Counties[2][3]	+22.1	+ 4.5	+15.8	+36.7	+40.9
Goods-producing	+ 3.9	-13.6	- 0.6	+18.6	+28.6
Service-producing	+33.2	+16.1	+28.0	+46 3	+48.0
Non-Metro Counties[3]	+34.6	+23.0	+26.0	+37.8	+60.5
Goods-producing	+23.8	+ 2.8	+15.8	+30.2	+62.3
Service-producing	+42.4	+39.3	+32.6	+44.5	+61.6

[1] Adapted from Table supplied by Claude C. Haren, E.D.D. E.R.S., U.S.D.A.. Originally compiled from BLS; E.S. Estimates.

[2] Includes transportation, communications and utilities which are not separately shown.

[3] Metro counties designated through December 31, 1977.

expansion in this ten-year period. This trend gained strength in the 1970's resulting in non-SMSA population growth of 15.8 percent as compared to 9.8 percent for SMSA counties.

By March, 1979, the major employment category for rural workers was in private sector services where 9 million of the 23 million rural workers were employed. This represented a 52 percent increase since 1970. The manufacturing sector employed 6 million workers and had increased 17 percent since 1970. Among the private sector services for the 1970-79 time period, trade employment increased by 48 percent; finance, insurance and real estate (FIRE) by 58 percent; and other services by 55 percent. Other major growth sectors were mining (a 55% increase) and construction (53% growth).

The changes in non-farm wage and salary employment over the past decade and a half provide an interesting contrast in rural and urban trends. Rural workers are now finding relatively more work opportunities in service industries rather than manufacturing or agriculture. Labor force participation by women has grown markedly, as they accounted for over two-thirds of the increase in rural employment between 1960 and 1974. In addition, longer term rural residents tend to be employed in agriculture and manufacturing, whereas recent migrants are more prevalent in construction, trade, public administration, and most notably, professional services.

The growth of many rural communities is becoming increasingly divorced from agriculture. For other communities, agriculture is the major stimulation for business and public service activity. Clearly, agriculture serves as an economic floor of varying importance from one area to another.

The farm population declined by 25 percent over the past decade and was less than 6 million people (2.6 percent of the population) by 1981. In spite of a steadily declining farm population, many rural communities have grown in population size and in economic diversity. Rural residents increasingly have the option of staying on the farm while working in manufacturing and service industries. In addition, evidence suggests that employment opportunities off the farm lead to new entrants into agriculture as part-time farmers.

The off-farm income of farm families rose three times as fast as their farm incomes during the 1960's, and grew from 42 to 51 percent of farm household income by 1970. By 1980, non-farm income represented 64 percent of farm household income and was substantially higher for small-size farms. Figure 1 is included to illustrate the importance of off-farm income in 1981 by farm sales class. Off-farm income sustained farm income losses for all classes with gross sales below $40,000. That is, off-farm income for these groups was above 100 percent of family income as farm losses reduced net family income. Non-farm income was 69 percent of family income for the $40-99,000 sales group, but dropped to 17 percent for farms in the sales class of $100,000 and over.

Obviously, the integration of farm and non-farm business interests is a growing reality of rural life. Induced changes are sure to occur in farm technology and in credit institutions to meet the needs of a small-farm sector that doesn't seem to be disappearing. The sub-commercial, full-time, family farmer may reap some benefits from the tenacity of this part-time farming sector, but only if economic policy supports this evolving pattern. Many farm families in the $20,000 to $100,000 sales range appear to be struggling for survival with limited off-farm earnings levels (Figure 1). Clearly, a great deal of variation in well-being occurs in these and other groups.

A first step is to recognize the spatial implications of commodity programs. The current Payment in Kind (PIK) program, as an example, impinges on crop producing areas in a different fashion than livestock areas, and has

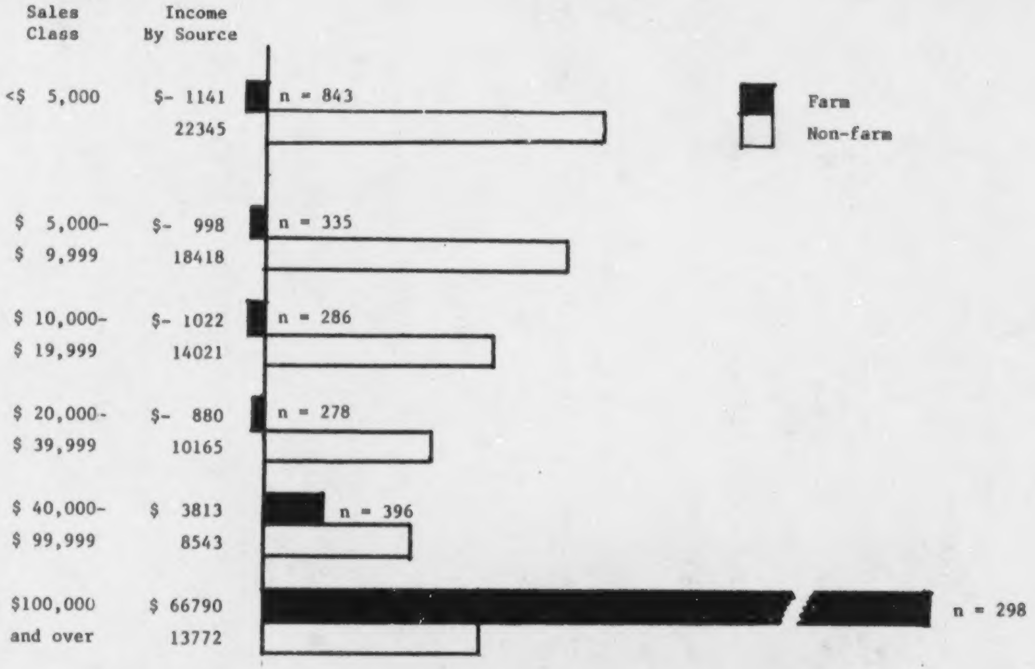

Figure 1: Income per farm operator family (including farm households), by major sources, by value of sales class, 1981.

Source: Constructed from data presented in Table 57, p. 81 of Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics, 1981, USDA, ERS, Washington, D.C.

differential effects among crop sectors. More significant, perhaps, is the variable impact of PIK on the farm supply sector. According to USDA's estimates the PIK impact on 1983 net farm income (estimated to range from $18 to $22 billion rather than the pre-PIK estimate of $15 to $19 billion) will be realized through reduced production expenses and increased government payments. Less farm spending for production inputs aren't spread equally across the rural business sector. Rather, farm machinery appears to be barely affected, perhaps 2-3 percent, whereas fertilizer and pesticide use and machinery repairs are expected to decline by 12-15 percent. Reductions in fuel and seed purchases are also quite significant.[1/]

While I am not aware of any definitive study on this matter, it is very likely that farm machinery dealers tend to be in larger population centers while fuel, fertilizer, pesticides, and machinery repairs are provided in smaller population centers, particularly in the major crop producing states. Therefore, the PIK program is likely to produce centralizing tendencies that seriously impair the economies of the smaller towns in rural America. Such effects should be anticipated in advance and policies implemented in full cognizance of such spatially unbalanced effects. The question of possible ameliorative policies could then be simultaneously debated.

Recent estimates of the losses to the agribusiness sector due to the PIK program were made for Iowa counties by Daniel Otto. Allowing for a statewide 20 percent "slippage" rate, he calculated that losses as a percent of crop related expenses would vary from a low of roughly 9 percent in Woodbury County to a high of almost 38 percent in Shelby County. Otto concluded that most

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[1/] All of these estimates are provided by USDA, Economic Research Service, An Initial Assessment of the Payment-in-Kind Program, Washington, D.C., March 31, 1983, pp. 17-20.

counties with the state average sign-up rate of 45 percent would incur an approximate loss of 25 percent in normal grain related agribusiness sales.[2/] Counties which specialized in corn and soybean production were most severely affected, counties with more diversified products such as hogs, beef, and dairy and generally those with a more diversified economic base were less seriously affected. These figures illustrate the spatial differentials due to enterprise mix. The figures reflect some variations due to the diversity in agribusiness locations and consumer business and services as these vary across counties. The variations within counties are probably even more pronounced. Employment effects followed a similar pattern of sectoral distribution but were slightly smaller in magnitude. Undoubtedly, the future well-being of many small towns has been sharply altered.

Underlying Causal Forces

Major changes in the spatial pattern and structure of economic activity do not simply occur in a vacuum. Nor are they attributable to one or two simple factors but, rather, to a complex set of social and economic circumstances. Although we have only a partial understanding of these forces, a commitment to exploring them further is an essential part of the responsibility of shaping public policy.

Two related forces can be identified that help explain the changing economic structure of rural communities. First, Americans have long demonstrated a strong attachment to the social assets most characteristic of small towns and rural areas. This "agrarian" tradition has persisted over

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[2/] See Daniel Otto, "Estimated Impacts of the PIK Program on the Rural Economy of Iowa", Cooperative Extension Service, Iowa State University, March 31, 1983.

several generations with surprising strength. It takes on new forms and is manifested in different ways from time to time but, ultimately, is a major factor shaping resource allocation in the economy. Among these amenities are family and kinship ties sometimes unique to particular cultural and ethnic groups. More important, perhaps, are reduced levels of the disamenities prevalent in larger urban places. Among these are less air and noise pollution, reduced fear of crime, ease of commuting from home to work, and less interpersonal strife.

The second factor is derived from the first and is expressed in the willingness of rural workers to accept a lower wage for doing the same work in a rural or small town location as compared to an urban location.[3/] Since, industrial production activities can be carried out in small towns and rural areas with equal or perhaps greater efficiency, the lower wages serve to further stimulate economic expansion of industries whose products are sold competitvely with the output of urban-based plants.[4/] Hence, a declining "efficiency wage" results in greater profitability for rural-based firms and has a cumulative, positive effect on the economic growth of small towns and rural areas.[5/]

[3/] For evidence of this and discussion of the community and interpersonal determinants see: Brady J. Deaton, Larry C. Morgan and Kurt R. Anschel, "The Influence of Psychic Costs on Rural-Urban Migration", American Journal of Agric. Econ., May, 1982, pp. 177-187; Irving Hoch, "Settlement Size, Real Income, and the Rural Turnaround", Amer. J. Agr. Econ., December 1979, pp. 953-59; and Joe B. Stevens, "The Demand for Public Goods as a Factor in the Nonmetropolitan Migration Turnaround", in David L. Brown and John M. Wardwell, New Directions in Urban-Rural Migration, New York: Academic Press, 1980, pp. 115-135.

[4/] See Ronald L. Moomaw, "The Determinants of Regional Differentials in Productivity: Alternative Estimates for the Manufacturing Sector", Department of Economics and Finance, Oklahoma State University, Stillwater, 1982.

[5/] Here I am using the term coined by Nicholas Kaldor, "The Case for Regional Policies", Scottish Journal of Political Economy, November 1970, pp. 337-348.

Most research on this question points to the lowest efficiency wages in communities of 10,000 to 25,000 population. Communities in this population range, for example, experienced the highest incidence of industrial growth in the non-metropolitan counties of Kentucky and Tennessee during the early 1970's.[1]

Implications for Balanced Economic Growth

This evidence seems to suggest that the future growth of rural America may center around mini-growth centers where basic community services and amenities demanded by manufacturing and the growing service sector can be provided. Sufficient infrastructure is needed to support and upgrade the quality of education and training for an increasingly sophisticated rural economy.

The service sector has been the leading edge of rural economic growth. This sector depends on the rapid adoption of the latest advances in communication and information technologies and a skilled, responsive labor force. Rural areas and small towns which can not muster sufficient resources to support these developments likely will be left behind, just as many small farmers were left behind in earlier decades. This new expression of the technological treadmill will continue to force rapid adjustments in rural communities.

Rural communities have achieved economic improvements during the 1960's and 1970's under the prevailing economic policies and world environment of the past two decades. The observed outcomes are consistent with overt public policy objectives designed to achieve balanced economic growth and to aid distressed rural areas. These policies were implemented through such supportive programs, among others, as those of the Tennessee Valley Authority, the Farmers Home Administration, the Appalachian Regional Commission, the Economic Development Administration, and the Community Services Administration.

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[1] For details on this study see Eldon D. Smith and Thomas H. Klindt, Industrial Location in Submetro Tennessee and Kentucky Communities, Southern Cooperative Series, University of Tennessee, Knoxville, Bulletin 258, June 1981.

Under post-war agricultural programs and supportive general economic policy, this nation has experienced a steady reduction in poverty and equalization of economic opportunity. The poverty rate was essentially cut in half during the 1960's, but increased slightly over the erratic decade of the 1970's. Some of our most distressing cases of economic hardship significantly improved even through the 1970's, notably the Appalachian Region.

In other areas the evidence is mixed. Research by Stinson reveals that the 1962-72 gains in the equality of educational spending may have been lost by 1977, and may have had a disproportionately negative impact on predominantly black populations.[1] It is not clear whether these changes are due to shifting preferences, greater economic uncertainty, or the down-side of the business cycle.

Even though poverty rates remain higher in the South and Southwest than for the entire nation, the incidence of poverty fell more rapidly in the sunbelt than in the nation for the 1969-1975 period.[2] Some evidence suggests that much of this improvement was due to business cycle phenomena or to unique sectoral improvements, such as the early 1970's coal boom in central Appalachia.

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[1] See Thomas F. Stinson, "Public Services in Rural Areas", in Outlook '83 Agricultural Outlook Conference, USDA, Nov. 29-Dec. 1, 1982, Washington, D.C., pp. W-69 to W-82.

[2] See William A. Darity, Jr., "Distributing the Fruits of Growth: Winners and Losers in the Sunbelt 'Boom'", Adherent, Vol. 8, No. 2, July 1981.

For example, evidence reveals that black females in the rural South showed the most striking wage gains during the economically healthy period of 1965-70, but experienced little if any gain during 1970-75, a period of general malaise in the nation's economy. The wages of white males, on the other hand, continued to grow over this entire period.[1/]

This evidence is disturbing because it brings into serious question whether the hard-won gains of the past two decades are sufficiently imbedded in a structural realignment of the economy or, instead, represent merely short-run results of heavy public subsidies. Recent evidence points toward the latter conclusion, though it seems overly pessimistic not to point toward noteworthy lessons from this period that can help shape future policy.

The eroding federal support for rural economic development programs combined with the shift of program responsibilities back to state and local governments raises serious questions about the future well-being of the more distressed rural areas and the low income groups in society. Unfortunately, these changes are occurring at the same time that inflation and economic recession on the national level and monetary adjustments on the international level threaten to erode state and local control over economic affairs and to create an environment of general uncertainty.

Reduced federal expenditures for social services and regulatory agencies and for rural infrastructure diminish the countercyclical buffer that has benefitted rural communities, particularly since the early 1960's. Local commerce and local sales tax revenues depend on revenue sharing and other federal program

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[1/] For detailed assessment of this data see Randall P. White, Harold Willis and Albertine Banks, "A Research Note on Wage Gains in the South: A Panel Study of 68,937 Workers, 1965-1975", The Rural Development News Notes, Vol. 3, No. 1, January 1981, North Carolina A&T State University, Greensboro, NC.

funds and their multiplier effects to sustain business and public revenues during periods of slow national economic activity. This buffer is diminishing at a time when two factors suggest that they will probably be needed more than ever.

First, the emergence of a well-integrated international capital market and the growing openness of the U.S. economy to international market forces will almost surely increase the instability of small, open, rural economies.[1/] More intense competitive factors will impinge on a given industry with increased abruptness. Industrial sectors that make up the predominant employment in small communities may be acutely affected. Similar instability in the local agricultural sector will only compound the income, employment and, in turn, local business sector effects of heightened local economic instability. While our nation may reap significant economic gains from reduced trade barriers and expanded exports of agricultural products, these benefits may have to be redistributed back to states and/or specific communities to ease the hardships of unanticipated economic adjustments.

A second factor that may compound the above instability is the phased deregulation of banking set in motion by the passage of the "Depository Institutions Deregulation and Monetary Control Act of 1980". With the aim of improving competition in local markets among banks, thrift, and money market institutions, the deregulations have resulted in more bank mergers and larger size operations. The character of small town banking is going to change as a result.

[1/] For comments on the scope and significance of this see G. Edward Schuh, "U.S. Agricultural Policy in an Open World Economy", Testimony presented before the Joint Economic Committee of the U.S. Congress, Washington, D.C., May 26, 1983.

The presumed benefits of bringing outside funds into small communities and improving local banking efficiency may accomplish the reverse. Investment funds of small communities may virtually disappear during periods of tight money as foreign demand for funds outcompetes small businesses. Whether these costs will be offset by broader gains in other sectors of the economy is unclear. What is clear is the potential for a greater uncertainty of investment funds for many communities. The increased uncertainty has already contributed to reduced long-term lending.

Implications for Future Agricultural Policy

Rural development means the development of rural people and their communities in that order of emphasis. Ultimately, people development can not be divorced from place development. However, we often slip too easily into an exclusive emphasis in rural infrastructure. The pervasive externalities associated with wastewater and solid waste disposal and with roads and bridges make this understandable. The social benefits to be derived from human capital investments are probably even greater. I want to place renewed emphasis on the human capital side, because both social justice and economic growth require it.

Considerations of social justice and the external, often intergenerational, consequences of human capital investments provide a strong rationale for federal public sector intervention to insure across the board, minimum levels of human capital investments. This is consistent with the rationale for federal involvement in public school finance and with recent judicial opinion supporting equal schooling opportunity. The information revolution mandates increased investments to support lifelong educational opportunities, including continuing education and vocational training and retraining. Other critical investments supportive of the human capital emphasis include basic health care, nutrition, and libraries. Programs to cultivate quality people begin with the nutrition of the mother and extend throughout the life of the offspring. We have long recognized this extended horizon in planning agricultural programs. We should link agricultural policies to similar long-term policies of extended health care, education, and training.

Programs designed to diversify local economies, to expand the range of job skills and to provide venture capital for new entrepreneurs should be among any new policy considerations. This will be particularly important for developing prototypes of products that incorporate technological innovations. Processes which add value to food and fiber may be among the leading sectors and hold growth potential for rural areas.

The business sectors of small towns and rural communities depend on a sound mix of such public services as water and sewage systems, police and fire protection, and the provision of adequate housing. In addition, effective local leadership must be cultivated and support services provided to facilitate planning for the orderly development of these services. Among the latter, training of local elected officials in methods of economic planning and business management, public finance, and impact assessments should be emphasized as these skills are becoming increasingly important in an environment of economic uncertainty.

The cooperative extension services of many land grant universities have attempted to meet the needs of local governments and small businesses in these areas. Their efforts have been severely hampered by reduced federal support. Consequently, extension programs have retrenched into their more traditional areas of endeavor. Certainly,we should not expect the Extension Service to divert funds from their proven ability to service the food sector with scientific knowledge. The welfare of both domestic and foreign consumers depends on continuing expertise in this area. However, in view of the dynamic economic changes sweeping over our small towns and rural communities, a principal need is for the most advanced, research-based knowledge regarding economic growth and development and related socio-psychological adjustments. Such knowledge must be drawn from the social sciences and humanities as well as from the biological and physical sciences. The proven model of cooperative extension should be revitalized and provided with sufficient funding to monitor research advances coming out of our institutions of higher education and to extend this information to the diverse businesses, volunteer organizations and local government clientele which can make immediate, effective use of it.[1/]

This approach represents the most cost effective method of enabling small towns and rural communities to resolve land use conflicts, to enable an informed public to develop a new land use ethic worthy of the best values of our society, and to launch a meaningful assult on ignorance and poverty through enlightened programs to develop economic opportunity.

More than ever before agricultural policy must be carefully synchronized with macroeconomic monetary and fiscal policies, recognizing the potential benefits of world economic ties. Rural economies face a growing vulnerability to aggregate economic forces. Therefore, policy toward commercial agriculture must be shaped in recognition of its spatial implications. Policies that impinge on particular crops and processing sub-sectors have unique socio-economic, business, and political implications for impacted communities.

[1/] For further discussion of this point see Kenneth E. Stone, "The Importance of Business Management Educational Training through Community and Rural Development Programs in Extension," Extension Service, Iowa State University, Ames, January 1982.

Adjustments in commercial agricultural policy must take account of the particular needs of the families of small-farm operators who can not adjust to changing economic conditions and who earn little if any income off the farm. This group is concentrated among black farmers in the South but includes significant numbers in other regions. With appropriate support many of these farmers can develop more land-intensive, high priced farm output. But for many in all parts of the country, income supplements are the only solution to a poverty-level existence. The appropriate level of income support should be structured to provide incentives for off-farm work for those who can obtain such employment. More importantly, however, such support should be designed to avoid the negative connotations of welfare payments and to stimulate the development of skills that will lead to transition into new jobs.

Particularly, the intergenerational consequences of human capital development should be considered. Children of low-income farmers should be given special opportunities for advanced training and alternative educational opportunities. The wasted human resources resulting from historically determined social blight can not be tolerated when our nation needs maximum resiliency and flexibility in its human resources.

Nobel Laureate T. W. Schultz has argued that "Knowledge is Power in Agriculture".[2] I would extend this assertion to the small business and agricultural support industries of rural America. These sectors can play a vital role as future leading sectors of economic strength in the U.S. We have developed some agricultural institutions to provide support for renewed economic strength. Public policy should encourage diverse program activity, institutional innovation, and the intellectual capacity to respond to changing social and economic conditions. This entails the need to understand interrelationships in the economy and the broader society. In this way, the strength to be gained from knowledge can be usefully applied.

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[2] See his article of this title in Challenge, September-October 1981, pp. 4-12.

Mr. **Tosterud**. Thank you very much, Mr. Deaton. Senator Abdnor will be back shortly. For the record, I am Bob Tosterud, staff economist for the Joint Economic Committee. I will continue the hearing until his return.

The Senator has several questions that he wants to address to both of you together and then individually. So we'll proceed with those.

Most forecasters contend that the decade of the 1980's shows substantially less promise for U.S. agriculture than that experienced by this industry during the 1970's. Mr. Urbanchuk, you highlighted that.

Are you seeing any of this reflected in the farm input and service industries and in rural America.

Mr. Urbanchuk.

Mr. **Urbanchuk**. Yes. I think that with regard to the farm-input-supply industries, the growth that we expect to occur not only in the United States, but around the rest of the world, will not be as robust as we experienced during the 1970's. That is, we will not experience the substantial increases in planted areas that we achieved during the 1970's. As a result, the expansion in the market for many of the inputs, and particularly the area-related inputs such as equipment and fertilizer, will be more so than in the chemicals area, where combinations of applications and that sort of technology can increase or at least supplement the demand for those products.

But I don't believe that we're likely to see the increases either here or abroad in planted area that we have seen during the 1970's and, as a result, the markets for those supplies will grow at slower rates.

Now, that means, with regard to the supply industry—and the rural businesses that rely on distributing and servicing those equipments—I think we're likely to see a bit more stability regarding demand for those services than we have during the 1970's, when we had more gyrations with regard to business activities.

Mr. **Tosterud**. Is there a difference between stability and stagnation?

Mr. **Urbanchuk**. Yes; I would characterize stagnation as essentially no growth. I think we're likely to see the first part of the 1980's, say between now and 1985, as a period of positive growth. But I would not say tremendous growth—putting aside the current year, 1983, and the impact of PIK—I think we're likely to see a recovery from that with growth through the 1986 period of time without tremendous variations or swings throughout that period of time.

Now there's one other thing that I would like to say and it's implicit in my remarks here. We do expect that one of the major emphasis on policy, agricultural policy, between now and let's say 1985 or 1986 is likely to be on the supply controls, some form of a program that does attempt to restrict planting so that we will get some stability there, rather than flat out growth. Or, on the other hand, substantial cutbacks such as we had this year.

I think that policymakers are likely to look very closely at the level of stocks that are being maintained and try and restore some balance between supply and demand with regard to the major commodities. And we expect that that will likely continue pretty much through the 1986 season.

So I think that the difference there between stagnation and stability is—as I say, stability, you have stability with a period of positive growth. Stagnation implies no growth at all.

Mr. TOSTERUD. Mr. Deaton, do you have a comment, please?

Mr. DEATON. I'd like to make just one comment. When we talk about stability in the 1980's, particularly, the last few decades would indicate that a major part of potential instability lies with the health and well-being of agriculture worldwide. And I think we have to be cautious in terms of what that means for the 1980's. It seems there's something unsettling about looking for the salvation to a major agricultural problem in hopes that there will be some major disaster around the world that will bail out American agriculture.

And, in fact, we all know that very well could be the solution to some of our problems today. But that would be unfortunate because we hope, of course, that world conditions in agriculture will improve and that America can certainly expand its own role in that improvement process.

But I guess my point is that whether the 1980's will be relatively stabler is a real serious question. I would hypothesize that we are likely to see continued instability worldwide that will affect American agriculture to a very great extent. And I think our policies have to be formulated within that environment of some anticipation of continued uncertainty.

Mr. TOSTERUD. I might add that other witnesses who have appeared before the subcommittee have stated that the 1980's will be a feast- or famine-type situation.

Mr. DEATON. That's what I fear.

Mr. TOSTERUD. And we may not have the farm programs currently on the books that can effectively handle that situation.

Mr. Urbanchuk, you mentioned that strong supply-control programs will be necessary for the next several years. Could you please show us some implications of this relative to the farm supply industry? Is this the kind of industry that we can turn on and off as we change Federal farm production control programs?

Mr. URBANCHUK. No, I don't believe that it is. And we've seen in this current year—it has been an extreme case, of course—that we have come out of an environment where the farm-supply industries, particularly the equipment manufacturers, have had to adjust very dramatically to a number of years of declining real net farm income and declining demand for products, and their inability, really, to effectively exploit farm markets to a great extent.

The inherent structure of these companies does not lend them the flexibility to be able to adjust production in a relatively short period of time. I think that one of the reasons we're likely to see some emphasis on supply control over the next few years is to try and even that out with regard to the market for these particular products.

I indicated earlier that we expected growth. We do expect growth in terms of planted area. The growth, however, will not be as substantial or as variable as it would be without those supply-control programs.

Mr. Tosterud. But let's say as a result of the depressed current economic condition of agriculture, that we have a contraction in the farm-support industries. What is there to suggest that when we get an economic recovery for agriculture, that those support industries are going to be there to maintain that recovery?

Is the contraction, in many cases, permanent? Will they fear, as many farmers do, yet another depression down the line and refuse to expand to support the economic recovery of agriculture?

Mr. Urbanchuk. In some cases, I'm not sure that will be the case. What we're likely to see is some increased concentration in those industries. I think the fear of another substantial downturn in agriculture is always there. It's a cyclical industry, by definition—really, by its very nature.

So, I think that concern is always there.

One hopes in the industry that you have enough good years to make up for the bad years that you have suffered through, and that over the long-term things will more or less even out.

Mr. Tosterud. But during the decade of the 1970's, it was growth, growth, growth.

Mr. Urbanchuk. It was growth, growth, growth, not only here, but abroad as well. And in many cases, I think there was overexpansion, particularly in the second half of the 1970's. Then when the economy turned around very, very substantially and the agricultural situation turned as well in the very late 1970's and early 1980's, this caught up with those companies.

Now with any kind of hope, they have learned a lesson from that and will retain some flexibility. Now, in many cases, I think there will be individual firms that may not survive. I think we're likely to see some concentration. But I do believe that they will be there to support this.

I think that, also, a considerable amount of attention will be devoted to trying to develop foreign markets for many U.S.-produced supplies, which really was not done during the 1970's. Most of the growth was devoted to the rapid increase in U.S. area during the 1970's. I think that many companies are likely to look toward other areas of the world as potential increase in market.

Mr. Tosterud. Another way to ask the same question is, is there excess capacity in the farm-supply industry, as you see it right now, and where is it and what kind of adjustment problems can we expect as they begin to come down to a more realistic level of agricultural production?

Mr. Urbanchuk. Right now, the largest area of excess capacity is perhaps in the equipment and implement industry. With regard to the adjustment there, again, that's going to require a fairly substantial improvement in the current situation in order to bring operating levels back to a sustainable rate.

Mr. Tosterud. Mr. Deaton, do you have a comment on any of those questions?

Mr. Deaton. I essentially agree with what Mr. Urbanchuk said. The farm machinery industry, and perhaps the fertilizer industry, appear to have made significant overinvestments in the 1970's, which to many of us is always a surprise in these days and times when we see such strong response to market fluctuations. That simply underlies, I think, sort of the thrust of my comments. I think we have to decide how we're going to adjust to those to promote somewhat more instability—more stability, I'm sorry—because oftentimes that instability wreaks havoc on small communities, particularly in small communities in the Midwest and the Farm Belt of this country, which are heavily dependent on the input supply industries for agriculture for their well-being.

We're going to continue to see some communities going out of existence, basically, which is not new in the experience of this country, but it can make for some tough times in many parts of the country.

Mr. **Tosterud**. A lot of witnesses during these hearings have favored stability. Dead is a rather stable condition, and that relates back to my question to you, Mr. Urbanchuk, regarding stagnation versus stability. Let me continue.

To be a little bit more specific along the lines that we were talking about earlier, do you have any feel for the impact of the PIK program on farm supply firm bankruptcies and foreclosures?

Mr. Urbanchuk.

Mr. **Urbanchuk**. I think the impact on the number of bankruptcies and foreclosures in terms of the farm implement supply industries—I don't have a feel for the numbers in that, to be honest with you—would be relatively short lived. Again, keep in mind the fact that we expect the impact on 1983 to be substantial, but relatively short lived. I think that a lot of individual firms are likely to look at 1984 and 1985 as a period of much more substantial growth for the industry, and I think that bankers and financiers are likely to look at that as well.

As a result, we're likely to see, or not to see, an increased number of dead and wounded lying around; 1983 will be a difficult year for the industry, clearly. But I think that as we've gone through the early parts of the year, a number of people were able to identify that fairly readily, and hopefully have made adjustments accordingly.

As I indicated earlier, what we appear to be doing is offsetting short-term gain with the longer term advantage, and hoping that longer term advantage comes, and that the agricultural sector will be able to participate belatedly and follow the rest of the economy as we go through a period of economic growth.

Mr. **Tosterud**. Well, Wharton Econometrics hasn't been following the failure rate of farm implement firms, for example?

Mr. **Urbanchuk**. No, we have not. I do not have a feel for the numbers.

Mr. **Tosterud**. You're rather sensitive to the rural communities, Mr. Deaton. Have you seen any dramatic change in the current composition of firms within rural communities or their prospects?

Mr. **Deaton**. It's hard to get specific numbers on that at this point. Of course, the farm machinery sales, as best I understand from econometric forecasters, are up above perhaps what was anticipated earlier since farm machinery tends to follow farm net income, and net income has been buoyed up by the PIK program, to some extent.

And in that context, one could view the PIK program as having some redistributive effects toward consumer industry since farm income has been buoyed up, toward farm machinery, which follows farm income, and perhaps some shift away from the insecticide, fertilizer, and other farm input supplies.

Now if those are distributed uniformly through the economy, then there is a fairly uniform effect on communities. My hypothesis would be that perhaps they are not and that many relatively small communities in the farm belt areas, regions heavily dependent upon farming, may have small communities with input suppliers, excluding farm machinery.

That's just a guess. But to the extent that that occurs, then those communities would be unfairly affected. And in talking to economists in a number of States in the Midwest recently, there is some feeling that some of the really small communities heavily dependent on machinery and repairs and input supplies, are undergoing some serious difficulties right now. And that there may be some continued move out of the really small communities toward those medium-size communities of maybe 10,000 to 25,000 population, which happen to be the communities that are experiencing more growth in manufacturing and service sector development.

So it's a sort of minigrowth center kind of notion that may be being continually forced on us by the agricultural policies.

Mr. TOSTERUD. Well, as was mentioned in the chairman's opening remarks, 1983 will likely mark the fourth consecutive year of record low farm net income in real terms. And that has to have had a rather dramatic impact on farm supply and service firms. And then following 3 years of low income with PIK—a mammoth PIK program—certainly that has to have some kind of an impact on cash flow in perhaps marginal industries, for marginal firms that are located in rural communities.

So, therefore, one would suspect that something is going on out there and the need to quantify it, perhaps.

Senator ABDNOR. Maybe I can ask Mr. Urbanchuk—I was very distressed when I heard your projection. You're probably right. I'm sure you're right. It's just the thought of it. Exports today, about 35 million metric tons going into Russia and it could drop to 25 by 1992. That spells nothing but further problems for everyone, don't you think?

Mr. URBANCHUK. Yes, sir, I do.

Senator ABDNOR. Is that going to be typical of other importing countries of lesser quantities?

Mr. URBANCHUK. I don't believe that it will, Senator. Take a look at the Soviet Union. Of course, we in the United States have enjoyed a fairly close trading relationship with the Soviet Union up until very, very recently. The Soviet Union has been one of our largest markets for exports, particularly of grains.

The Soviets, on the other hand, are very serious in terms of trying to reduce their dependence on imported commodities, particularly grains, from the West, and in particular, from the United States since, of course, we have proven ourselves—in their eyes, at any rate—to be somewhat less than a reliable producer.

On the other hand, the Soviets also realize that they have a long way to go in terms of improving the technical aspects of their agricultural system, particularly in the area of increasing feed conversion rates and the more efficient and effective uses of grain.

What we're seeing now is a set of policies that will act to do two things: One, to increase their long-term production of grains and at the same time use the grain that they do have much more effectively to include the combination of using coarse grains and wheat with increased imports of soybean meal and other high protein meals, where we may benefit as well, to try and reduce the total imported quantity of grain, and hence their dependence on the West.

Senator **Abdnor**. This has been their goal for quite a while. But actually, they haven't even come close to succeeding. You think they are finally going to take off and become more productive?

Mr. **Urbanchuk**. Well, we have seen some organizational changes take place in the last year or so. You're right. This has been a major element of the Soviet 5 year plan for the last number of years.

What we have seen within the past year are some positive steps that have been taken, changes in management structure, for example, and incentives with regard to agriculture. I think one of the most important things to note has been the improved sowing progress that the Soviets made this year. As you may be aware, the Soviet Union experienced drought conditions in the fall, which affected the germination of many of the fall-sown crops. They knew they had to do a very substantial job of spring sowing.

Well, they did it at absolutely incredible rates. I mean, at rates that have never been before experienced in the Soviet Union.

Matching that up with a lot of the rhetoric that has gone along in the Soviet press and reported by the West of Andropov's efforts to get people more productive, to get them out working, I think this is not really a fluke. What we are likely to see—and will be, I think, confirmed, during the harvest time—is that if in fact they're serious, they can make substantial gains just by these kinds of techniques.

So that's one aspect.

Senator **Abdnor**. I know nothing about Russia and I know you're an expert on it. But their diet has been very sparse, very limited, hasn't it? Aren't the people themselves, at least to a degree, demanding more and more of an improved diet?

Mr. **Urbanchuk**. Yes, sir, they are.

Senator **Abdnor**. It amazes me how they have been able to suppress the food need for as long as they have. But that's getting more difficult as the people are becoming more aware of what's going on in other parts of the world and the kinds of diets other people have.

Do you think, even though they may produce more, they're going to need a lot more as time goes on? You say they're making greater use of it.

Mr. **Urbanchuk**. In quantity terms, yes, they will. Their population growth rate is essentially not that different from our own. In terms of total population size, it's essentially the same.

In terms of total nutritional value, the average Soviet diet is not that different from the average American or the average west European diet.

Now the distribution of that diet among cereals, vegetables, and meats is considerably different. And a major aspect of Soviet plans has been to try and upgrade the quantity and the quality of the Soviet diet by bringing in more protein—more meats; so there's a substantial emphasis on increasing meat production and maintaining livestock numbers.

The second area that I was gong to get into in which we've seen very substantial progress is in trying to improve feed efficiency rates; that is, increase the conversion rates by a much more technically efficient means of combining high protein oilseed meals such as soybean meal, which is not being imported from the United States but basically is coming from Western Europe. But Western Europe is importing most of its soybeans from the United States, so the American farmer is—if not directly, then secondarily—participating in that increased demand.

But what we're seeing is that the Soviets are attempting to increase their ability to produce meat by using grains much more effectively. And I think this is likely to continue. We're not talking about really, major programs. Programs that took place in this country 25, 30, and 40 years ago. The Soviets are just starting to realize that this must be done. And they can make substantial gains in increasing production without doing an awful lot.

And I think that's likely to occur.

So from an export perspective, I'd say over the next 5 to 10 years, we're likely to see a smaller market in the Soviet Union. The Soviets will, however, remain a large market with regard to the world and I think it's imperative for us as a country to adopt a policy that recognizes the fact that they are as important a market for us as we are a supplier to them. And that can provide a fairly nice basis for export growth.

Senator **Abdnor**. Well, then, following that, you were talking about the overall world trade and our competitors, particularly the European Common Market. I think you said that it would be a mistake to get into a trade war. But what alternative do we have? We have been trying to work out some common agreements on trade. But we're not faring too well, from the little I know about it.

What does the future hold in store if we just sit back? If we look right now, I probably won't quarrel with the statistics given here saying that our total production is dropping, but overall, grain production throughout the world is going to be greater. I guess the record will show that other nations are getting more and more of the foreign sales of grain.

What's the answer to this problem?

Mr. **Urbanchuk**. I think we have to do a number of things. One, it probably is unwise to compete head-on-head with the European communities in certain marketplaces. Largely, as I indicated before, I think we run some substantial dangers of inciting much more retaliation, particularly with regard, as I indicated, to the soybean complex.

I think it's incumbent upon us from an economic policy perspective to try and promote overall world growth, particularly in some of the developing countries, the less developed countries and the centrally planned economies—who have been established clients and customers for the United States—so that we increase total demand for world grains and, as a result, our degree of participation.

Senator **Abdnor**. Yes; but what is going to keep the European Economic Community from doing what they've been doing, offering to sell it for less, giving them better financing? Can you just sit back? Even if we do find new markets, there's bound to be an increased trade once the economic recovery takes hold even in those other developing countries. I don't think the picture is very bright for us if we don't go out and compete.

All we did when we sold that wheat flour to Egypt was recapture some of the market that we had prior to France taking it over. But we finally went in there and undercut them and got it back. Maybe that isn't the way to go, but how else are you going to handle this situation?

I guess that's part of the dilemma. Everything being even when we start out, there's no doubt in my mind that we could get a good percentage of the new market, the new increased grain sales. But I'm not too sure that we're going to be able to do it if we don't have some understanding and work out some kind of an agreement with the European Common Market. And if they refuse to talk to us, then what do we do?

Mr. **Urbanchuk**. Well, I think you're right. I think we do need an agreement with the European Community, particularly over this area.

One of the answers may lie in relative cost of production and the cost of subsidization of exports by the European Community. One area particularly may be with regard to the establishment of loan rate levels. If we were able to reduce our loan rate levels and our support levels, thereby putting downward pressure on the world price levels, it makes the subsidization of their exports much more expensive with regard to their operations because of the relative differential of the cost of production between the United States and the European Community.

Keep in mind that I don't think the European Community is going to give up on the "Common Agricultural Policy". That is almost more of a social policy than it is an economic policy.

Senator **Abdnor**. Isn't there some grumbling going on by the consumers over there now? They've been paying dearly for this, right?

Mr. **Urbanchuk**. Yes, sir, they have.

Senator **Abdnor**. Is there starting to be some reaction from the consumer? I mean, they can become as vocal there as they can in this country.

Mr. **Urbanchuk**. Actually, more so. I think more governments fall in Eruope because of agricultural policy than for any other reason, or at least they have, at any rate. I don't know how much of the current unrest in some of the countries is related to agricultural policy, but I do know of a number of riots in France over the past several months in which agricultural people have participated.

Senator **Abdnor**. What's your thought, Mr. Deaton, on this subject of world trade? How do we counteract what they're doing to us and get part of that market? We can't even keep them out of our traditional markets, let alone let us share in some new markets. They're doing a pretty good job of coming into this country, too.

Mr. **Deaton**. There are two aspects of this that I would suggest are worthy of consideration. One is to look at the entire world economy and recognize that much of the growing trade of the

United States is with what used to be called at least Third World countries, where we have seen the success of economic development programs in various parts of Asia, Africa, and Latin America.

As a result, because of their increased income levels, the higher demand for quality food has placed America in good stead in terms of export expansion toward those countries. So I think we have to look broadly in that respect.

Specifically with regard to the European Community, I think we have to take a broader philosophical view, perhaps, and recognize what it is that makes American agriculture competitive and what has put us in a fairly strong role in terms of the world. And that is, of course, the scientific knowledge and technology that we have been able to develop.

Agriculture is a knowledge-based industry and it's going to increasingly continue to be a knowledge-based industry. And in the past, America has, I think, been quite successful in exploiting the best products of our land grant universities and business community to achieve scientific advancements.

In that sense, our food production can be expanded at relatively lower costs and can be made competitive in a world market.

Senator ABDNOR. Let me stop you there. I just happened to think that what we've got to send technology to these countries so that they rather than we, will produce more.

You're saying that we should use this technology for our advantage in foreign trade. I mean, we produce for less. But there are some here who want to export technology, not products. Aren't we shipping more and more of our technology to lesser developed countries for the purpose of trying to get them to produce food? And they're probably producing it for more than they could buy it from us to begin with.

I didn't mean to interrupt you, but I just has to cite that as a problem. I know it is a problem because we have people who are less concerned about agriculture, per se, here in this country who are thinking that what we ought to be doing is helping those people produce more over in those lesser developed countries.

And some of them are not really that suited, maybe, for agriculture.

Mr. DEATON. Knowledge—excuse me.

Senator ABDNOR. Will you forgive me a second to go vote? Go right ahead with your testimony.

Mr. DEATON. I was just going to say that, of course, knowledge as an industry, so to speak, is a worldwide industry. We increasingly obtain scientific and technological advances through worldwide flows of information.

And as one who has placed his professinal contribution in an academic context, I am a firm believer in spreading knowledge as widely as possible because I believe that we can obtain gains as a nation and as a world community. I think we increasingly have to view ourselves as a member of that world community. Where we can promote scientific and technological gains. We can share it worldwide and still come off with a competitive advantage, in many areas, including agriculture.

Shorter term problems can often give way to that competitive edge. American agricultural products have to be kept competitive in an international sense. And increased productivity, I think, can lead toward that.

Mr. TOSTERUD. Certainly one of the greatest frustrations that we have is our apparent inability to reflect the true competitiveness of productivity of the American farmer in the international market place. It doesn't seem that we're able to do that very well.

How would you suggest we transfer the low-cost producers of food in this country and his or her ability to expanding markets? What's preventing us from fully reflecting that competitiveness in international markets?

Is it the loan rate?

Mr. URBANCHUK. I think our loan rates are, in fact, a contributor to that. That is one aspect. What we have now are a set of support prices that offset, in many cases, the fact that we do have substantially lower costs of production because of our efficiency.

The second part of this is not necessarily an agricultural aspect, but it nonetheless has a substantial impact. And that is the formulation of monetary policy that impacts on the value of the dollar. This has been one of the areas that has been particularly vexing to American agriculture over the past several years: the strength of the dollar.

I think our economic policymakers must take very close look at the impact of decisions with regard to policies, particularly monetary policy issues, that affect trade directly. Keep in mind that agriculture has been the only component of our merchandise trade balance—or our whole trade balance, actually—to show consistent surpluses. We have not had a deficit in agriculture—I don't know how far back, but certainly not in the past 20 or 25 years. I think the impact of these policies on our trade position must be looked at very, very carefully, because you can lower your loan rates and you can pass along those costs very effectively, but if that's offset by a strong dollar, then you're shooting yourself in the foot.

Mr. TOSTERUD. There are those who contend that we could almost eliminate entirely the loan rate and the value of the dollar would still prevent us from effectively competing in the international marketplace.

Mr. URBANCHUK. I don't know if it would prevent us from competing, but the strength that we have seen over the past year or so would slow down.

Mr. TOSTERUD. Or perhaps even a reduction in the loan rate would result in only marginal gains in our ability to compete.

Mr. URBANCHUK. That is possible. But when you have those two factors working in conjunction with one another, it makes it doubly difficult to do that.

Mr. TOSTERUD. Is there a possibility of relating in some way the loan rate to the value of the dollar on an inverse indexing basis, if you will?

Mr. URBANCHUK. That's a possibility. I had not thought of that, but that may not be a bad idea.

Mr. TOSTERUD. Mr. Deaton, you make a good case regarding the spatial implications of commodity programs. That is, some areas of the country are impacted more than others by commodity programs, depending on the kind of agricultural products grown.

This, in turn, causes a variable impact on the farm supply sector. What do you propose that we do about that?

Mr. **Deaton**. Well, I think we could begin by recognizing it and incorporate into our analysis what effects these various commercially oriented, commodity-oriented policies are going to have and then evaluate whether or not these represent healthy, long-term adjustments in our economy or whether some type of ameliorative, shorter term public policies may ease the transition process.

I have no doubt that we are going to have to perhaps lower support prices to some extent to make agricultural commodities more competitive. The problem may be that we have tried to accomplish too many objectives with our commercial agricultural policies and I think it's time we recognize that the income problems, the problems of low-income farmers and low-income farmworkers may have to be dealt with more directly with some of the human capital oriented programs I mentioned earlier.

And if we would do that, then we could, I think, deal with agricultural policy on a more effective basis, making it more competitive, perhaps, drawing on other strengths in our economy to look at the entire process in a package of macro monetary and fiscal policies.

And in cases where the instability of the agricultural sector is so great that it is affecting spatially different communities in the country, there may have to be policies from Farmers Home or the Small Business Administration or other publicly subsidized programs to ease transition for people and businesses in those communities.

Mr. **Tosterud**. You're saying at this point that if we're going to get into large-scale land retirement programs, we had best be prepared to offset some of the disadvantages as a result of those programs in regard to pumping up some other programs.

Mr. **Deaton**. Yes; my impression is that we still face a major adjustment problem, so to speak, meaning that there may have to be some resources taken out of agriculture in various places. And that is going to affect communities disproportionately.

When we have had farm policies in the past that have urged everyone to produce to their maximum, it always seems a little unfair that one particular sector is squarely faced with the burden of that adjustment process. Those are forces that go well beyond the ability of rational decisionmakers, in the case of farmers, to modify their resource base. And I am particularly concerned about what that means for their offspring, their children, and for the children of the small businesses in these rural communities to adjust.

So I particularly think that that is why we have to focus on education and skill training. This is all occurring, as I have said before, in the context of many broader policies. The whole information revolution that we're seeing is just affecting our entire economy.

One stock analyst recently said, it's not an industrial revolution; it's really a revolution in everything. It seems that there is growing uncertainty because of this. We are moving more toward a knowledge-based orientation throughout the economy.

I think in the future we are going to have to see attention given to more State and locally directed policies, perhaps for venture capital funds, for entrepreneurial identification and training, and for policies that specifically provide more resiliency in the local economies of our country, so that that adjustment process can be eased.

Mr. TOSTERUD. Mr. Urbanchuk, you state that your company's analysis indicates that a program containing a stronger paid diversion component is much less expensive in the long run than a program the size and magnitude of PIK.

How much stronger would you propose? Are you also saying that this option would be more effective? And is this your recommendation for a 1984–85 supply control program rather than another year of PIK?

Mr. URBANCHUK. We calculated that the current 1983 PIK program is likely to cost the Government somewhere in the area of about $15.1 billion. That includes, of course, not only the direct outlays, but the indirect outlays, which would include the cost of the loans that won't be repaid becasue of the PIK program.

The paid diversion set-aside program, which would have contained a stronger deficiency payment, we calculate would have resulted in not quite as strong an area of reduction of somewhere in the area of 80 percent of the area taken out that we ended up with, or apparently we've ended up with the PIK program. It would have cost roughly about half that, somewhere in the area of $7.8 billion.

We would recommend for 1984 that we look at a paid diversion set-aside program rather than another year of PIK. The only consideration that may offset that somewhat is the fact that we are still going to have very large stock levels at the end of this year, while the distribution among the farmer-held reserve and the CCC stocks versus the free market stocks will be better than it is this year. As I indicated, our current projections indicate somewhere around 8 percent of total corn stocks—for example, the free market category by the end of this season—we have seen a substantial flow of grain into the farmer-held reserve category without any consequent rise in prices. So there's no market mechanism to bring prices up, and certainly demand is not strong enough or will not be strong enough over the next year to bring prices up to levels that would provide for release of the reserves out of the program.

So a PIK program, which is another way of getting around releasing those stocks out of the reserves, is maybe one of the only ways to do that. I think that may also be a consideration for 1984 as well in order to bring those stock levels back down to more rational or reasonable levels.

I would just say that, given that consideration, I certainly would support the idea of a much stronger paid diversion set-aside program for not only the 1984 but perhaps the 1985 crops, particularly with the impact, as we've said, on the farm input supply industries.

We are looking for an increase in planted area even with the PIK program for 1984. But, clearly, it's going to take 1 year or 2 to recover from the cutback that they've had this year.

We are not going to get areas back to where they were 2 years ago until at least 1987.

Mr. **Tosterud**. How much sweeter do we have to make a paid land diversion program relative to the 1982 paid land diversion payment? Double?

Mr. **Urbanchuk**. I would say not quite double that which we had for the 1982 program. We would also have to take a look at some other factors as well, and that is take a look at the no-lid constraint on the entry of grain into the reserve categories. Remember also one of the other factors involved in the 1982 program was the ability for advanced diversion in the deficiency payments.

I don't think you would need to have a program of quite that magnitude in order to do it.

Senator **Abdnor**. Just a few more questions. I'm sorry I have to go back and forth, but they're voting every few minutes here and it's in my best interest to vote and be on the record.

Mr. Deaton, you stated in your prepared statement that, and I quote: "Consumers at home and abroad were the principal beneficiaries of this era of cheap food."

Now I take it you would have no problem characterizing traditional commodity programs as a cheap food policy.

Mr. **Deaton**. Certainly, Senator, the results of those programs resulted in relative food prices at record low levels for a nation. Of course, as a nation, up until at least the 1970's, we had steadily declining food prices as a proportion of the consumer dollar. The significant scientific achievements and merchanization of agriculture that occurred in the 1950's resulted in significantly lower food prices than the world had ever seen before. Through our food aid program and world trade, consumers around the world benefited and, as I emphasized in my prepared statement, particularly the low-income consumers.

I pointed out that our food stamp program, which helped distribute the benefits of that to the lower income people, resulted in significant gains being made for those people that needed it the most.

At the same time, of course, as relatively less of the consumer dollar is spent on food, that means that a lot more can be spent on other products. The strength of our small communities, to some extent, has depended on the growth in expenditures in the service sectors and the furniture stores, shoe stores, and clothing stores of rural American.

Senator **Abdnor**. Of course, while that does have that benefit, unless the Government steps in and heavily subsidizes the farmer, there's just no way you can continue to do that. I guess that's the difference between this country and other countries of the world. Some places they're willing to pay more for that food—at least those who can. I am sure there are those at the poverty level receiving some form of assistance.

But you just can't go on providing it for less than you produce it. I guess that's the overall problem that we have. As a matter of fact, I know you're right, and it's shocking. Did you say 64 percent of the families on farms, small farms, get what percent of their income outside of the farm?

Mr. **Deaton**. Right. For the Nation as a whole, taking all farm families, 64 percent of their family income, net family income, comes from off the farm.

Senator **Abdnor**. I wonder what percent of the agricultural production do they produce? I know it's a large amount. They're family farms, too, in this concept of family farms. But a few of them certainly produce probably more than all these people together, right?

Mr. **Deaton**. Yes; if you look at sales classes above $100,000, those families earn significantly less of their income from off the farm and they produce the bulk of American food. It is in the 80 percentile, I think, with those in the sales classes below $100,000 producing smaller amounts of food.

It's still a significant proportion of certain crops in certain areas of the country. I think it strengthens many small communities because of the purchases of inputs and the marketing of those products, even outside the major farm-producing areas of the country.

Senator **Abdnor**. What disturbs us are the bankruptcies and foreclosures we see that are really coming from the category where 100 percent of their time is principally devoted to farming.

I don't know how many of those people we can lose before we have an agriculture that is more dependent on outside income than on agricultural income. Do you think that is a concern that could happen some day? That is, if you're going to be a farmer, you've got to plan on some kind of an outside job to go with it?

Mr. **Deaton**. It could happen, to some extent, and perhaps has happened, to some extent. But the bulk of American food is produced, of course, on the larger farms that are predominantly farm business operations and, of course, most of those are run by families, comments I'm sure you're quite familiar with.

Senator **Abdnor**. Either one of you two gentlemen can comment. Is it possible that we could get down to a small enough numbers of farms—particularly those who produce the bulk of the production of this country—so that if they got into a controlling situation they could almost set their own program and get their own price by selling the exact amount necessary to produce a price?

Could that happen? We're down to what, 3½ percent of the population, or 3 percent now?

Mr. **Deaton**. There are less than 300,000 farmers today that are in the sales classes above $100,000 gross sales. That's a relatively small number, of course, smaller than we've ever had.

I would think that we would need to be concerned about how small that can get, although there doesn't seem to be a great deal of indication that that concentration could really control the price of food. I think that that's something that the American public is very concerned about. Because of the broader implications of what the farm sector means to America, we still associate it with the concept of the family farm. And even though those numbers are buoyed up by the off-farm income, they still represent a source of strength in many small communities, as I said earlier.

But your points are well taken, that the larger farmers produce the bulk. They are smaller in number at all times, growing. And it ultimately would have to be a serious concern of public policy.

Senator **Abdnor**. It could be if this thing doesn't level off. We're sitting here and discussing the future direction of agriculture—at least in a program—in the years ahead. I guess you've been talking about it all the way along.

What are the areas that would concern you most if you were putting together a farm program today to take care of not just a few farmers, but one that would be good for agriculture, good for the Nation, and good for the rural towns and cities and the overall economy?

Would you agree that maybe we've got to become a little more innovative and come up with some new thoughts, that what we were doing in the past really isn't working that well?

Is that a fair statement to make?

Mr. **Deaton**. I can begin to respond to that. We're in a period of real economic uncertainty, I think, with regard to answers on that question. Clearly, as we have earlier, American agricultural products must be maintained in a competitive position in terms of international trade. And that may result in a certain reduction in farm support prices so that those commodities can be maintained competitively.

If we can view the larger commercial farms as primarily subject to market forces and able to respond, then we could focus a lot of our attention on the smaller farms toward the off-farm sector. So that we can look at the relationships between the farming and nonfarm sector and policies that can maintain some strength there.

Even for the full-time family farmer, I still think that there is a role for Government programs to ease the process of adjustment in view of the great economic uncertainty due to the opening up of the world capital markets and to international trade.

But, as I said earlier, I think if we look more toward the market for that sector of the economy, with some programs for the adjustment and protection against undue adjustment, because of the possibility of higher world demand for products in the future, which I think is certainly there, there we could look toward a real human-oriented policy for the smaller farmers and part-time farmers.

Senator **Abdnor**. Do you visualize more controls and more stringent regulations to help bring this about?

Mr. Deaton. I'm sorry——

Senator **Abdnor**. As you look into the future on farm programs—when we get over this hump or get straightened out—do you think controls and regulations of our farm production will be required? Do you think that farmers could go ahead and continue producing all they want to, from fence line to fence line?

Do you think that we are going to have to continue or enforce some kind of production control?

That's what I'm trying to say.

Mr. **Deaton**. I think we're likely to see a continued need for some production controls in the foreseeable future. But I think the tendency should be perhaps more toward the market adjustments for the bulk of the American farmers.

Senator **Abdnor**. Yes.

Mr. **Deaton**. But I think there's a role for the public when that begins to impinge on one group of communities particularly in a way that doesn't seem to be that healthy for the overall society.

Senator **Abdnor**. Mr. Urbanchuk.

Mr. **Urbanchuk**. I look at this as two prongs, and I generally agree with everything that Mr. Deaton said.

I think, first of all, we do have to be much more innovative than we have been in the past. Clearly, the political and the economic environment that we are working in now is different than it was 5 years ago, 3 years ago, or 10 years ago.

We've got to take a look at what that environment is likely to be over the next several years, and try to anticipate how programs should be established, not only with regard to their content, but how those programs would be administered.

We have to take a good, close look at the level of our support rates and our loan rates, at the way our reserve programs are managed and how they can be used in such a fashion to supplement—or complement, I should say—area-controlled programs.

I think we are likely to need—if not directly in front of us, then in our hip pocket—the ability to exert production control programs from time to time. Hopefully, though, we can take some of the resources that we have been devoting to acreage-control programs and turn those around on the demand side and try to promote agricultural trade and U.S. agricultural exports much more effectively on a worldwide basis, perhaps putting much more attention into the operation of the Foreign Agricultural Service and other areas where we could do a much better job of trade promotion and financing.

A third area is to try and look, and we talked about this just a bit ago, at some formal integration of farm policy into general, overall economic policy so that all the good intentions and well designed programs with regard to agriculture don't get put aside completely by other developments in economic policy in the area that just came up—the area of the value of the dollar.

I think those would be the key aspects that I would indicate with regard to foreign policy.

Senator **Abdnor**. We are very appreciative to have your thinking on it, thank you both.

Mr. Deaton, you are an agricultural economist. Would you support the administration's request for a freeze in target prices? And what kind of an impact would a freeze in target prices have on farm income and therefore, on rural and agricultural business, the whole spectrum there? I mean the farm, the little towns?

Have you given much thought to the possibility of a freeze on target prices? I guess that's where we can start?

Mr. **Deaton**. I have really not specifically, you know, on the question of freeze on target prices. I do think that that may not be the most effective way to deal with the income problem in agriculture, as I've indicated before, that if we free up, to some extent, the more commercially oriented aspects of our farm sector and worry about supporting income with other tools on an income basis, on the basis of need, in a more people-oriented policy, that would be a more effective way of achieving much of the adjustment that we have oftentimes tried to achieve with commodity oriented programs.

Senator **Abdnor**. What do you think about that?

Mr. **Urbanchuk**. I would be hesitant to reduce target prices, but I might recommend reducing loan rates. I would be more favorable to keeping target prices about where they are, keeping in mind that is one of the key measures to use in bringing an area out of production in an area-controlled program, such as what we're likely to have next year and the year after.

Senator ABDNOR. We won't cause them to produce more to offset——

Mr. URBANCHUK. I don't believe it would. But, again, what you might want to do in that case is to look at lowering the loan rates, which would, I think, have the impact for the reserve system.

Senator ABDNOR. Well, knowing net farm income, and particularly the income of those farmers that are totally dependent upon income from farming, how much less can they make before they go down the tubes, go bankrupt? Our net farm income is about the lowest since the depression days of the 1930's.

Mr. URBANCHUK. In real terms, it is, sir, yes.

Senator ABDNOR. We must be mindful of the impact on the farmer, too, because if they make anything less, they could well go into bankruptcy. Some may hang on a little longer, but it's even tough for the best of them, these last few years.

I'm just wondering, do we sit idly by and watch it happen, if we don't pick up in our foreign markets?

We're talking about the next couple of years. We're not gong to change this picture around overnight. There will be some creeping inflation going on. A drop of another 2 on 3 percent in the interest rates would be the biggest help to farmers right away.

But they could hardly afford to take much lower income, even though it's the way to go because of the overall economic picture and Government expenditures. But at the same time, just looking at the farmer, how much less can they take? It's an unfortunate situtation. I didn't see any figures or predictions for the immediate future that make anything look very rosy, unless we come up with something dynamic and different that we haven't thought of.

Mr. URBANCHUK. I wouldn't characterize the outlook as particularly rosy. I don't know how much less they can take before we run into very, very substantial problems with regard to increased bankruptcies.

I know our own projections, based on the view of the world that we have talked about today, indicate that we will see an improvement in net farm income, both in nominal and real terms, through 1985. In the near term, particularly in 1983, we are currently projecting nominal net farm income at $23.6 billion for 1983, about 15.5 percent above 1982 levels of $20.4 billion.

Now the composition of that income on the revenue side is a bit different from what you might see when we have cash receipts declings over year-ago levels, but the direct Government payments category picking up the slack there and providing the additional revenue. And in large part, that's of course due to the payments-in-kind program.

We do expect to see increased cash receipts as we enter 1984 and 1985. One is the result of somewhat higher prices. But two, again, is a result of stronger demand, both here and moderately abroad, providing for greater marketing.

Now you mentioned the decline in interest rates. One of the most substantial favorable factors that has affected agriculture over the last year has been an absolute decline in the level of production expenses. In large part this has come about through lower interest rates.

Now we don't expect to see major increases in farm production expenses over the next several years. We are looking at relatively modest rates of inflation over the next 3 or 4 years with regard to the United States, and this is one area that will be beneficial to a farm economy and, in large part, will help contribute to increases in total net farm income.

In addition, we are projecting that farmer cash flow will improve as well. But it is going to take several years—at least 3, maybe 4—before we return to a position that we enjoyed prior to, let's say, 1979.

Mr. **TOSTERUD**. I just have one question to Wharton Econometrics.

Mr. **URBANCHUK**. Yes.

Mr. **TOSTERUD**. It's more theoretical than anything else.

Mr. **URBANCHUK**. OK.

Mr. **TOSTERUD**. Has Wharton cranked into its macro models the impact on the growth of GNP as a result of idling 80 million acres?

Mr. **URBANCHUK**. Not formally. We have talked about that, and we have laid out a scheme to do that, but those numbers haven't been completely cranked through yet.

Mr. **TOSTERUD**. And do you plan on, in terms of your overall economic forecasts to——

Mr. **URBANCHUK**. Yes, yes. We're planning to do that. We are approaching it from a number of different perspectives. We're looking at the impact, of course, of the declines we talked about in terms of the supplier industries, roughly $5 to $7 billion of lost market—or potentially lost market, I should say—to the farm supplier industries. And then also on the Government cost side. As I indicated to you, we're currently anticipating the total cost of the 1983 PIK program at $15.1 billion, which is substantially more than I think most people expected 6 months or so ago.

So those are the two aspects that we are trying to put through the model right now.

Mr. **TOSTERUD**. Is your model compatiable with a stable agriculture in the 1980's versus an exponentially growing agriculture in the 1970's?

Mr. **URBANCHUK**. Yes; it is. What we have with regard to the 1980's in terms of total agriculture is slowly growing agriculture compared with the growth that we had during the 1970's. That's domestically. From a foreign trade perspective, we've got total foreign trade or total exports of most of the major commodities increasing throughout the decade, but at considerably slower rates than we had during the 1970's, and particularly during the second half of the decade rather than the first half.

I suspect that with the anticipation that we have got, of course, built into the models of a declining value of the dollar through 1984 and 1985, that we'll get some more strength in the first half of the decade than we will in the second half.

Mr. **TOSTERUD**. Over the last 2 years, we have a several billion dollar decline in our agricultural exports. How does that impact the general economy, in your view? In job creations, for example.

Mr. Urbanchuk. Well, I can't talk about job creation very much. But what it has impacted is the size of the deficit that we have, which has had an impact, of course, on Government monetary and fiscal policies. And I think, in large part, it has been sort of a snowballing impact. But it has affected more through the foreign trade sector than anything else.

Mr. Tosterud. You couldn't quantify any of that impact?

Mr. Urbanchuk. Not right here I couldn't.

Senator Abdnor. Gentlemen, we have kept you two witnesses for a long time. We certainly appreciate your valuable comments. I guess you know that we will be holding field hearings in July and August to garner new thoughts and ideas, to visit with our farmers in rural areas of the country, and see their response. We are well aware that it's going to be the agricultural committees of the House and the Senate that writes any kind of a farm bill. But we think that the testimony we receive here and our discussions are going to be very valuable to any committee trying to take up the difficult job in the days ahead.

You have made a great contribution today and we are very thankful and appreciative. As a matter of fact, our hearings will continue on June 22—I guess we're starting at 9:30 a.m.—the topic will be the "Program and Policy Choices in Agricultural Conservation." Senator Jepsen feels so strongly about conservation that we gave this a separate hearing by itself. I notice that the Governor of North Dakota will be here along with many others.

We have had some fine hearings and your presence today has certainly helped. Thank you for coming.

Thank you very much.

Mr. Urbanchuk. Thank you.

Mr. Deaton. Thank you very much.

Senator Abdnor. The subcommittee is adjourned.

[Whereupon, at 11:50 a.m., subcommittee adjourned, subject to the call of the Chair.]

TOWARD THE NEXT GENERATION OF FARM POLICY

WEDNESDAY, JUNE 22, 1983

Congress of the United States,
Joint Economic Committee,
Washington, D.C.

The committee met, pursuant to notice, at 9:50 a.m., in room SD-124, Dirksen Senate Office Building, Hon. Roger W. Jepsen (chairman of the committee) presiding.

Present: Senator Jepsen and Representative Holt.

Also present: Robert J. Tosterud, professional staff member.

OPENING STATEMENT OF SENATOR JEPSEN, CHAIRMAN

Senator **Jepsen**. Good morning. The committee will come to order.

I want to extend a hearty welcome to our panelists today. The discussion today further broadens the scope of our future farm policy choices to include the integration of long term soil and water resource conservation needs within an overall future domestic and international agriculture and food policy.

Based on previous testimony, it is clear that the central objective is not solely to produce maximum yields for maximum profit, but to insure the long-term stabilization of the agricultural economy in concert with its environment.

Now this includes food security; that is, maintaining a secure food supply to satisfy both domestic and international needs and demands.

It includes: Economic viability—developing a responsive and profitable economic condition for food production and distribution; affordability—that's insuring the consumers of a varied and available food supply at reasonable prices; equitable cost allocation—distributing the costs of a viable economy among the farmers, consumers, and the Federal, State, and local governments; and occupational accessibility—that's maintaining credit plans and policies that allow individuals to choose farming and related rural industry occupations as a way of life.

And most importantly, an environmentally as well as economically sustainable agriculture, one which combines soil and water conservation practices with profitability.

I have been traveling across the country in recent weeks to hold hearings on the Resources Conservation Act and the proposed national conservation program. State officials, farmers, resource users, and others are expressing concern that the production control, credit, and other farm income economic policies that promote excessive food and fiber production for expansion in the international trade markets is resulting in the significant deterioration of our agricultural land. These farm policy goals have been contrary to resource conserving land management practices.

The recently enacted PIK program is one of the few farm economic programs in which we can combine conservation and production goals; that is, increased conservation and reduced production.

With the farm economic outlook being somewhat bleak, the outlook for conservation improves, and conversely, when the farm economy recovers, the benefit cost efficiency of investing in conservation practices is no longer profitable.

The incentive policies should not be the vehicle to which soil conservation policies are tied. But they should be the tool through which soil and water conservation enhancements can be required to insure a sustainable agriculture for future generations.

Presently, Congress is considering legislation that may set the precedent for our willingness to condition Government programs, in an attempt to solicit farmer participation in a resource conservation farming system.

The Federal Government should be able to expect a minimum level of soil conservation and good land stewardship in return for price-enhancing production policies. This is not the least we can ask, or expect, but it is within reason.

I visited earlier this morning with Governor Olson, and it seems the consensus across this country is building that voluntary participation in conservation programs may no longer be a luxury that this Nation can afford. In rethinking our direction for the next generation of farm policies, we need to explore ways of integrating conservation incentives and maintaining our environmental consciousness as priority objectives in other segments or agricultural policies.

We are investing public dollars and the public trust in this exercise to formulate policies that will renew the overall prosperity of the agricultural economy.

Finally, however, this prosperity will come not only from high profits, but also from the inherent Federal-State commitment to a land that fosters the appreciation of our natural resources and the commonsense to manage them wisely and with care.

And finally, I want to remind our National Public Radio audience that they can participate in these hearings by mailing their views on future farm policy to Box A, Joint Economic Committee, Washington, D.C. 20510. That's Box A, Joint Economic Committee, Washington, D.C. 20510.

And, at this point, without objection, we will place the opening statement of Senator Abdnor in the printed record.

[The opening statement of Senator Abdnor follows:]

OPENING STATEMENT OF HON. JAMES ABDNOR

Program and Policy Choices in Agricultural Conservation

I extend my welcome and appreciation to today's witnesses. Certainly, one of the greatest tragedies of agriculture's depressed economic state is its diminished capability to address and effectively deal with the deteriorating condition of its land and water resources.

The dramatic expansion in agriculture's output during the 1970's placed tremendous pressure on agriculture's environment. Major problems were encountered in the areas of soil erosion, fertilizer and pesticide pollution, and soil and water salinity associated with irrigation.

Our current massive land set-aside programs have given us and our land time to pause and assess the effects of crop and livestock production on the environment over the next several decades.

I'm confident that today's witnesses can, and will, assist greatly in that assessment.

Senator **Jepsen**. Again, I extend a welcome to Governor Olson, Governor of North Dakota, and chairman of the Soil Conservation Task Force of the National Governors' Association; to Norman A. Berg, Washington representative of the Soil Conservation Society of America, and long what you would call a "byword" in soil conservation in this country, a legend; a symbol of fine things.

Do you want me to go on?

Mr. **Berg**. Thank you very much.

Senator **Jepsen**. And Robert Gray, a most articulate spokesman for soil conservation. He's the director of policy development for the American Farmland Trust. Also Neil Sampson, who said he was in the back of the room this morning when I came in, just "idling his motor," getting warmed up to put the throttles all the way forward when he joins the panel.

Neil is enthusiastic and energetic; a great voice for conservation in this country. He is the executive vice president of the National Association of Conservation Districts.

A blue ribbon panel. I am anxious to hear what you have to say.

Governor Olson of North Dakota, you may proceed. I would advise the panel that your prepared statements will be entered into the printed record; so what you have in writing will be recorded. Therefore, you may proceed in any manner you wish.

Governor Olson.

STATEMENT OF HON. ALLEN I. OLSON, GOVERNOR OF NORTH DAKOTA, AND CHAIRMAN, SOIL CONSERVATION TASK FORCE, NATIONAL GOVERNORS ASSOCIATION

Governor **Olson**. Thank you, Senator Jepsen. It is a rare privilege for me, as well as the other panel members, to come before you and the committee today. But I come on behalf of the National Governors Association and its Soil Conservation Task Force to discuss the importance of soil conservation.

The Nation's Governors are pleased that this committee has chosen to examine this important subject as part of its effort to determine options our Nation has in shaping farm policy in the post-PIK period.

Today, it is my intention to focus on the role of State governments in meeting the challenge and opportunity that lies within the need to develop our Nation's soil and water resource base. We have actively participated in this subject in two ways: First, we have devoted considerable time and resources to determining the proper course of action by the States. Second, we are deeply concerned about the impact and scope of various Federal programs. We have testified before Congress and commented to the Department of Agriculture at various stages in the development of the National Program for Soil and Water Conservation that the President transmitted to the Congress on December 21, 1982. Along these lines, the administration advocated in its report that our first long-term objective is to, and I quote, "develop a program that will lead toward nondegradation of the Nation's soil and water resources."

We concur fully with the administration's sense of objective. We know from the Dust Bowl days of the 1930's that soil can deteriorate quickly if not managed properly and that we cannot be lulled by the huge, yet temporary, surpluses that plague our farm economy. Rather, we have to view our natural resource needs with a sense of urgency that is inherent in the qualities of sound stewardship.

In short, the Governors are committed to sound conservation practices and policies and programs that are consistent with this need. In general, our philosophy is to keep marginal land out of production and good land in production. This will require State-Federal cooperation in the areas of research, education, and conservation practice incentives for farmers.

With this philosophy in place, we must sell our farm products and that means an aggressive marketing policy. Our ability to export farm products is vital to the development of our economic and social strength. This will require Federal financing of exports, especially funding for extended credit and blended credit programs for developing countries. We should produce and sell rather than pay our farmers to not do what they do best, and that is grow food.

The Congress and the administration should begin now to investigate the cost-benefit effect on the National Treasury of moving toward a permanent market expansion program, specifically export subsidies, and away from temporary, nonproducing programs like PIK. This country has never had a long-term bipartisan agricultural export policy, but it is long overdue.

With regard to Federal soil conservation programs, there are two items that are at the top of our agenda. First, we are strongly supportive of Senator Armstrong's sodbuster legislation, S. 663. We believe that the removal of incentives by the Federal Government to cultivate highly erodable land is absolutely essential. It is our hope that this bill will be signed into law in the very near future.

Second, we are supportive of Senator John Melcher's amendment to the appropriations bill which will increase spending for soil conservation, including the allocation of $10 million for block grants to States. This program, authorized by the Agriculture and Food Act of 1981, has not been previously funded. In supporting this provision, as it goes into conference, we will suggest that language be added that will permit the Governors and the Secretary of Agriculture maximum flexibility in identifying the appropriate State agency to receive such funds.

This provision, which was strongly supported by Chairman Jepsen of this committee, leads me to the heart of my remarks today. States are deeply committed to developing more effective soil erosion and water conservation laws. These efforts range from expanding the roles of the districts to developing more effective programs and, in some cases, new State agencies, to respond to this problem.

Before I cite some examples of what States are doing, I would like to share with you some of the principles that the National Governors' Association believes should guide programs at all levels of government. These principles have been developed through a 2-year process that was begun by my predecessor, former Iowa Governor Robert Ray. We came to identify these after many meetings with producers, elements of the private sector, the environmental community, and with Government officials. These principles include:

First, programs must contain a climate of permanence—and I emphasize "permanence"—so that producers can have confidence in the future of the land, of agriculture, of themselves and of their children; second, producers must see programs as fair and acceptable in light of their public-private relationships; and third, that program ideas should come from the local level up, rather than be imposed by the Federal Government.

Unfortunately, neither the Federal Government nor the States have performed at an accceptable level consistent with these principles. Rather than meeting the needs of producers and helping them to combat a serious national menace, our programs and program budgeting have been erratic and contradictory. The result has been that our farmers and ranchers are bewildered and frustrated and that millions of cost-sharing funds have been wasted as producers have struggled to meet the economic realities of the market place while maintaining a hopefully acceptable level of conservation practice.

We believe, as a result of our work, that some standards should be adopted at the earliest possible time which will restore producer credibility in our conservation programs while maximizing the public's investment.

These would include:

First, cost-share projects should be mintained by long-term contracts such as those utilized in the Great Plains Conservation program;

Second, no-till or minimum-till techniques should be utilized wherever possible. Governments can encourage such techniques by low-interest loans for equipment through tax incentives or through direct payments for such practices. Property tax credits at the local level can be most effective when joined with State and Federal programs;

Third, farm programs should be evaluated for the impact such programs have on conservation practices and that conservation farmers should not be penalized by any price support program; and

Fourth, spending for conservation programs should be targeted at the areas where soil erosion is most severe.

These standards, combined with the principles that I have enumerated, are designed to restore producer confidence and make our programs as meaningful and fiscally sound as possible, meeting the needs of both taxpayers and farmers and ranchers. The adoption of such a framework of principles and standards is crucial to sharing a viable soil conservation effort for the remainder of this century.

Senator Jepsen, I would like now to turn to some of the things that the States are doing to meet soil conservation needs. These examples include:

In Missouri, recently adopted legislation authorizing a $20 million cost-sharing program.

In Maryland, likewise, adopted a small cost-share program to assist applicants in installing best management practices to lessen pollution caused by erosion, animal wastes, nutrients, and agricultural chemicals.

In Mississippi, they have announced the development of Operation HOT—Hold Our Topsoil. The program, which was announced by Gov. William Winter, will include onfarm demonstrations in building erosion control dams, terraces, and grassed waterways, to carry out all of the other elements of a good, solid, soil conservation program.

In Iowa, during the 1983 legislative session, they appropriated $14 million in new funding to the Iowa Department of Soil Conservation, funds that will largely be passed on to its 100 soil conservation districts for increased cost-share programs and additional technical services, carrying on the excellent philosophy that Governor Ray and Senator Jepsen so well illustrate in reference to the State of Iowa.

In my State of North Dakota, we approved a $425,000 appropriation to hire 17 additional soil conservation technicians who will replace a like number of soil conservation service employees who have been terminated in the past few years because of Federal spending cuts. In addition, local soil conservation district mill levy authority was established by this most recent session of our legislature.

The soil conservation task force of the National Governors' Association, as a result of an effort that I announced earlier this year, will soon communicate with the Governors of all 50 States on our observations concerning the opportunities that States have in the area of soil conservation. We considered proposing a model State act for soil conservation, but had chosen another approach for reasons primarily relating to the differences that exist between States. Through this effort, we believe that we will be able to provide States with information that will help empower them to make more informed choices in the area of soil conservation. We are proud of the work of many States, individually, and of our task force, in particular.

Senator, our natural resource base provides the fabric that produces food and fiber that meets the needs of consumers in virtually every corner of the globe. Our statement today has outlined the principles and standards we believe that should be at the heart of every soil conservation program, either at the Federal, State, or local level. We think that much work needs to be done before we can be assured that our programs are meeting the needs of both producers and taxpayers, providing our food system with a natural resource base that it will need for the remainder of this century.

Finally, we have provided you with five examples, all very recent, that demonstrate what a diverse group of States has done to meet this need.

In closing, we want to thank you for the opportunity to be here today and we look forward to working with you in the future. Thank you.

[The prepared statement of Governor Olson follows:]

PREPARED STATEMENT OF HON. ALLEN I. OLSON

Mr. Chairman, members of the Committee, it is a privilege for me to come before you today on behalf of the National Governors' Association and its Soil Conservation Task Force to discuss the importance of soil conservation. The nation's governors are pleased that this Committee has chosen to examine this important subject as part of its effort to determine the options our nation has in shaping farm policy in the post-PIK (payments-in-kind) period.

Today, it is my intention to focus on the role of state governments in meeting the challenge and opportunity to develop our nation's soil and water resource base. We have actively participated in this subject in two ways. First, we have devoted considerable time and resources to determining the proper course of state action. Second, we are deeply concerned about the impact and scope of various federal programs. We have testified before Congress and commented to the Department of Agriculture at various stages in the development of the National Program for Soil and Water Conservation that the President transmitted to the Congress on December 21, 1982. Along these lines, the Administration advocated in this report, that our first long-term objective is to "develop a program that will lead toward nondegradation of the Nation's soil and water resources."

We concur fully with the Administration's sense of objectives. We know from the Dustbowl days of the 1930's that soil can deteriorate quickly if not managed properly and that we cannot be lulled by the huge yet temporary surpluses that plague our farm economy. Rather, we have to view our natural resource needs with a sense of urgency that is inherent in the qualities of sound stewardship. In short, the Governors are committed to sound conservation practices and policies and programs that are consistent with this need. In general, our philosophy is to keep marginal land out of production and good land in production. This will require state-federal cooperation in the area of research, education and conservation practice incentives for farmers.

With regard to the federal government, there are two items that are at the top of our agenda. First, we are strongly supportive of Senator William L. Armstrong's sodbuster legislation, S. 663. We believe that the removal of incentives by the federal government to cultivate highly erodable land is absolutely essential. It is our hope that this bill will be signed into law in the very near future. Second, we are supportive of Senator John Melcher's amendment to the appropriations bill which will increase spending for soil conservation, including the allocation of $10 million for block grants to states. This program, authorized by the Agriculture and Food Act of 1981, has not been previously funded. In supporting this provision as it goes to Conference, we will suggest that language be added that will permit the Governors and the Secretary of Agriculture maximum flexibility in identifying the appropriate state agency to receive such funds.

This provision, which was strongly supported by Chairman Jepsen of this Committee, leads me to the heart of my remarks today. States are deeply committed to developing more effective soil erosion and water conservation laws. These efforts range from expanding the roles of the Districts to developing more effective and, in some cases, new state agencies to respond to this problem.

Before I cite some examples of what states are doing, I would like to share with you some of the principles that the National Governors' Association believes should guide programs at all levels of government. These principles have been developed through a two-year process that was begun by my predecessor, former Iowa Governor Robert Ray.

We came to identify these principles after many meetings with producers, elements of the private sector, the environmental community, and with government officials.

These principles include:

1. Programs must contain a climate of "permanence" so that producers can have confidence in the future of the land, of agriculture, of themselves and of their children.
2. Producers must see programs as fair and acceptable in light of their public/private relationships.
3. That program ideas should come from the local level up rather than be imposed by the federal government.

Unfortunately, neither the federal government nor the states have performed at an acceptable level consistent with these principles. Rather than meeting the needs of producers in helping them to combat a serious national menace, our programs and program budgeting have been erratic and contradictory. The result has been that our farmers and ranchers are bewildered and frustrated and that millions of cost-sharing funds have been wasted as producers have struggled to meet the economic realities of the marketplace while maintaining a hopefully acceptable level of conservation practice.

We believe, as a result of our work, that some standards should be adopted at the earliest possible time which will restore producer credibility in our conservation programs while maximizing the public's investment.

These include:

1. Cost-share projects should be maintained by long-term contracts such as those utilized in the Great Plains Conservation Program.
2. No-till or minimum-till techniques should be utilized wherever possible. Governments can encourage such techniques by low interest loans for such equipment, through tax incentives including property tax credits at the local

level, or through direct payments for such practices. Local tax credits can be most effective when joined with a cooperative state and federal program.

3. Farm programs should be evaluated for the impact such programs have on conservation practices and that conservation farmers should not be penalized by any price support program.
4. Spending for conservation programs should be targeted at the areas where soil erosion is most severe.

These standards, combined with the principles enumerated above, are designed to restore producer confidence and make our programs as meaningful and fiscally sound as possible, meeting the needs of both taxpayers and farmers and ranchers. The adoption of such a framework of principles and standards is crucial to sharing a viable soil conservation effort for the remainder of this century.

Mr. Chairman, I would like to now turn to some of the things that states are doing to meet soil conservation needs. These examples include:

1. Missouri recently adopted legislation authorizing a $20 million cost-sharing program. This program is aimed at landowners with lands eroding above tolerable soil loss limits. The practices that are covered by the program include terraces, waterways, diversions, water impoundment reservoirs, erosion control structures, conservation tillage systems, contouring, strip-cropping and filter strips.
2. Maryland likewise adopted a small cost-share program to assist applicants in installing best management practices to lessen pollution caused by erosion, animal wastes, nutrients, and agricultural chemicals.
3. Mississippi has announced the development of "Operation HOT"--Hold Our Topsoil. The program, which was announced by Governor William Winter, will include on-farm demonstrations in building erosion control dams, terraces, and grassed waterways. It will also provide information on sod and crop rotations,

new plant species, no-till and minimum tillage farming, cost-sharing erosion control programs, weed control, new cultural systems, and soil management.

4. Iowa during the 1983 legislative session appropriated $14 million in new funding to the Iowa Department of Soil Conservation, funds that will largely be passed on to its 100 soil conservation districts for increased cost share programs and additional technical services. Part of these funds were set-aside for continuing the Wind Erosion Control Incentive Program that is designed to minimize wind erosion from roadways throughout the state.
5. North Dakota, my home state, approved a $425,000 appropriation to hire 17 additional soil conservation technicians who will replace a like number of Soil Conservation Service employees who have been terminated in the past few years because of federal spending cuts. In addition, local mill levy authority was established by the 1983 legislature.

The Soil Conservation Task Force, as a result of an effort that I announced earlier this year, will soon communicate with the Governors of all 50 states on our observations concerning the opportunities that states have in the area of soil conservation. We have considered proposing a Model State Statute for Soil Conservation but have chosen another approach for reasons primarily relating to the differences that exist between states. Through this effort we believe that we will be able to provide states with information that will help empower them to make more informed choices in the area of soil conservation. We are proud of the work of many states individually and of our Task Force in particular.

Mr. Chairman, our natural resource base provides the fabric that produces food and fiber that meets the needs of consumers in virtually every corner of the globe. Our statement today has outlined the principles and standards we believe that should be at the heart of every soil conservation program, either at the federal, state or local level. We think that much work needs to be done before we can be assured that our programs are meeting the needs of both producers and taxpayers, providing our food system with the natural resource base that it will need for the remainder of this century. Finally, we have provided you with five examples--all very recent--that demonstrate what a diverse group of states has done to meet this need. In closing, I thank you for the opportunity to be here today and I look forward to working with you in the future.

Senator JEPSEN. Thank you, Governor Olson. We'll now hear from Norman Berg. Norman Berg is the Washington representative for the Soil Conservation Society of America. You may proceed, and welcome, Mr. Berg.

STATEMENT OF NORMAN A. BERG, WASHINGTON REPRESENTATIVE, SOIL CONSERVATION SOCIETY OF AMERICA, WASHINGTON, D.C.

Mr. BERG. Thank you, Mr. Chairman, members of the committee, and also fellow panelists, both we here at the table and the panelists to follow.

You have heard, and many sitting in this room have heard, many excellent witnesses in the six hearings held since May 19. And those who have listened have to be impressed, and some even awed, with the broad array of issues involved in forging future public agricultural policy that will best serve our citizens of this country.

Now adding agricultural conservation and then financing in the 1980's, as you'll do today and tomorrow, is most desirable. These 2 days will further verify that there are no simple solutions to these complex problems. However, post-PIK policy must be considered while there is still time and we agree when the Secretary stated that USDA doesn't have all the answers. And you may well be asking about this time who does?

Well, we'll come away from this timely series of hearings with a better knowledge of agriculture. It's our largest and most productive industry, and partly because of that production, we have some of the problems that we are talking about today.

I have just recently spent some time in a car looking at the growth of corn and the beginning of soybeans and so forth in the Midwest. It's what those lands are for and it's what, as the Governor says, those farmers are for. And hopefully, with a little cooperation from the weather, they will have good results.

Now I have 10 observations to make in about 10 minutes. Now, 10 is no magic number and if you had given me 20 minutes, I probably could have had 20 observations. [Laughter.]

I would ask that my full prepared statement be made a part of the record.

Just briefly, these 10 observations will first be farm policy, as we listen to these series of hearings, is primarily economic. Soil conservation is far down the agenda.

Second, Government and agriculture are linked, and I think they are going to be linked forever.

Third, farm policy drives soil and water conservation on the farms and ranches of this country.

Fourth, scientific and technical knowledge we have that is not being used as fully as it should be.

Fifth, I think we need to relate and put to bed, perhaps, the relationship of the marketplace and the public interest in our long-term natural resource picture.

Six, RCA, the blueprint for the future, will it work?

Seven, I think we need to relate land use, as the Governor mentioned, to the capability of the land.

Eight, just a word about the Soil Conservation Society of America, nearly four decades old. I'm a charter member. We have advocated since the beginning the science and art of good land use. And it is an art, along with being a science.

I am concerned, too, as No. 9 will point out if I have time, that we are not the gloom and doom boys, if we have statistics and data and evaluations that say we have problems that we need to address in this decade and for the next century. And that relates to the information, hopefully, that will be coming from the national resources inventory, soon to be available from the Department of Agriculture.

Ten, I would like to say a word, if we have time, about PIK and RCA.

First, soil conservation, until this morning, was seldom mentioned in the prepared statements. Farm policy, to the average listener or prior hearings, is structured as the farm bill of 1981 states in its preamble, to provide price and income protection for farmers, assure consumers an abundance of food and fiber at reasonable prices, continue assistance to low-income households, and for other purposes. And soil and water conservation is one of those.

Some have expressed the need for relating farm, food, foreign, rural development policy and, hopefully, natural resource policy, in a more comprehensive approach. That's going to be very difficult.

The major shaping of the next generation of farm policy and, so far, as the New York Times has reported, nobody has suggested a radically different approach, although I would suggest that former Agriculture Undersecretary John Schnittker had a fairly courageous and encouraging statement with his short-term and long-term suggestions.

But as you approach the problem, it's going to have to relate to how to manage surpluses, loan rates, target prices, disaster payments, et cetera, et cetera. And soil and water conservation is down a ways on the agenda. But increasingly, it is being placed in context with the other important actions, and we appreciate that, Senator. We really do.

Now that's a fairly recent development. I would like to call attention to looking at the transcript of May 19, 1983, when you had dialog between yourself and Secretary Block. It's important that it be part of the record for those who didn't have a chance to hear it, and I'll paraphrase.

You said:

> Finally, Mr. Secretary, but one last question. Because of economic pressure and restrictions at the individual farm level, water and soil conservation practices have become viewed as luxuries. I can't help but note, as chairman of the Soil Conservation Subcommittee, that there is no mention of soil conservation in your remarks today with regard to where we're going with the farm policy in this country.
>
> What role do you see the Department of Agriculture playing in encouraging or perhaps even requiring the application of conservation practices? And what is your feeling about requiring farmers to comply with some level of minimum conservation standards if they receive federal assistance for their farming operations?

The Secretary replied:

> I do believe we are making a lot of progress in rural America. It is my personal feeling that farmers should comply with some minimum soil conservation standards on their farm if they benefit from Federal farm programs. I have felt that for some time. I am not firmly convinced that the time is right for that to be implemented. I

am pleased that you are holding hearings and that you are addressing that issue in your hearings. I am going to be interested in what is gleaned from those hearings because that has been my personal opinion for some time. I am not convinced that we have the legal authority to do it; however I am told by attorneys that I want to know what kind of authority we have and what kind of statutory authority would be needed.

I think we can help the Secretary on his personal conviction that something ought to be done. And the study that Bob Gray will relate to will help in terms of farmers' views on this.

My second observation—despite the desire and hope for a market-oriented agriculture, farmers and their governments, especially their Federal Government, are linked inextricably. Reluctantly, this off-and-on marriage has finally produced a fairly candid admission that though each, the Government and the farmer, would prefer the next generation of farm policy to be one with no, or at least a minimum of Government intervention, it's probably not to be. There will continue to be a role for Government in agriculture and for soil and water conservation. The quest is to have farm, food, foreign, rural development, and perhaps other policies that are more compatible and directly supportive of soil and water conservation.

A third observation is the importance of accepting that farm policy is a significant driving force in whether or not farmers and ranchers conserve soil and water. One aspect of that is, of course, that legislation in terms of most of the programs related to what we call farm policy are entitled. And therefore, the character of those programs, when they are put into action, are causing, as we see this year, spending that is not controllable. But all of the USDA conservation activities—research, cost sharing, credit, education, technical assistance—all are controllable, have been, still are, probably will be, and not only at the public, but at the private level. The idea, then, is that we can postpone that until a later date.

But farm policy is not only a driving land use and conservation force. Too often in the past, it has been in the wrong direction.

One thing that I would endorse is what I heard at an earlier hearing, and that is as we need to divert land from intense crop use, we ought to consider the quantity produced—tons, bushels, pounds, et cetera, not acres, if we're going to try to do something about controlling supply. And that will do more for soil and water conservation, too.

Fourth, we have a great wealth of scientific information that is available about the quantity and quality of our natural resource base. We know a great deal more about how to live with the natural world than the users now use. There are also findings about conservation problems other than soil erosion that include concerns about water supply, upstream flood damage, the soil toxicity, and soil compaction problems.

There are people that are concerned about fish and wildlife habitat and there are people concerned about water quality, even, I noticed in the Post this morning, the Vice President.

We'll know more than ever before when the 1982 natural resources data and evaluations are made public, hopefully soon.

Fifth, the relationship of the marketplace and the public interest. Now the traditional views of the marketplace, as I listen to the economists in the universities and embodied in Adam Smith's "invisible hand" theory, suggest that if left alone, the forces of supply and demand will provide an appropriate level of balance in our society. This view holds considerable currency today, simplistic though it may be. Although the nature of the relationship between natural resources, soil in particular, the private sector land users, the public interest, and Government roles to protect that interest is complex, it is clear that there is a symbiotic relationship.

The major soil erosion concerns for society in a public interest sense are significant, although they are diffuse. These concerns range widely. They include not only maintaining the long-run productivity of soils to insure a stable source of food and fiber, but environmental quality is also a significant public interest concern that results from soil erosion.

We agree that we should not stifle the viability of agriculture with too much Government. However, soil conservation did not fare well in the open, free-for-all, market-oriented, fence row to fence row, all-out production campaigns of the early 1970's. The effect of years of dedicated landusers using the traditional soil conservation programs and the anciliary benefits of past farm policy that paid farmers to take land out of production to reduce agricultural output almost disappeared during this past decade as the farmers and, in many cases, patriotically, responded to the high export demands and consumer price concerns.

Then the recent 3-year crunch in the farm economy has not been conducive to private investments for long-term soil conservation, either. And the appraisal of the resource conditions in the trends are disturbing and they led to several actions, including the Resources Conservation Act. And a better understanding that the soil conservation aspects of farm policy are too often a byproduct. We feel that the time is right for an integrated agricultural and conservation program, one that takes advantage of the cycles of the farm economy to deliberately do more to protect the Nation's soil.

There are those who will be reluctant to endorse this linkage and will label it cross-compliance. By contrast, we see these dual problems as a great challenge and are optimistic that they can be met. It will result when Government has the will to act, based on improved and scientific understandings of some of the conservation problems.

Sixth, the national program for soil and water conservation as the blueprint for the future, will it work? Well, there are many, many elements in that program that came up here in December that I strongly endorse. There are some elements that were left out. During the transition period between November 1980 to January 20, 1981, I directed the USDA RCA staff to consolidate all of the prior information that resulted from 3 years of the RCA process at that time. The objective was to put all of the available resource data, the alternatives that had been considered, the public comments that had been received, and the potential strategies that had been looked at into an RCA working paper for the new Secretary and his advisers. Then when they were ready for the soil and water conservation issues in the Department, we could provide the options that had been considered and that would be available for their decision.

That working paper, RCA document dated January 28, 1981, listed 10 program elements, including the need to establish a complementary relationship between the Department's soil and water conservation and the Department's farm program objectives. It proposed that farm programs include provisions that would encourage producers to use their land according to its capability. All crop land, including potential crop land, now in force, pasture, range, or other uses, would be classified, using the national cooperative soil survey as the basic reference.

I won't go into too much detail on this, but we had three categories. Category A would be those soils where sustained annual agricultural production is possible, with no special requirements for their use other than good management; 53 percent of the total U.S. cropland acreage, at that time, was in that category.

Category B were soils that could sustain annual agricultural production without excess erosion, provided that they had the proper approved soil conservation practices, including the choice of crops and possibly intermittent production to hold erosion to a tolerable level; 42 percent of the total U.S. cropland acreage, at that time, fell in that category.

Category C was the problem area. Sustained annual production is not possible because these soils have severe limitations that restrict their long-term use to grazing, woodland, wildlife, water supply or aesthetic purposes. And 5 percent of the total U.S. cropland acreage, at that time, fell in that category.

A key point, and this would have required legislation, was that all lands in categories A and B would be eligible for inclusion in the future farm programs for commodity loans, et cetera, et cetera. However, lands in category C would be excluded from Federal farm program benefits, except in extreme national food supply emergencies requiring all-out production. The approach, of course, would be mandatory for those who got that Federal assistance.

There are more details to this program element, but the USDA did not develop it further, and I haven't followed it for the last year. It obviously is not in their program that came up in December 1982.

The other element that was left out, but considered in USDA was a recommendation to the States to develop and implement State conservation practice acts. The cost share or the grants to States enacted in the farm bill of 1981 was in there as one of the methods to help encourage the States to do this by matching some of their funds that it would take to carry out that idea. That would have been voluntary, but it would have been an incentive.

A seventh observation is that the Department has long had this land capability classification system of classifying agricultural lands from classes 1 through 8. I'm not going to go into too much detail on this, but we do have that information. Therefore, to the extent possible, Government programs should require that land be used within its capability and treated in accordance with what is needed in terms of conservation, and the challenge, of course, is how to get it done.

We, too, endorse the sodbuster legislation that has been sponsored by Senator William Armstrong and Representative Hank Brown and many others. You've had hearings. This should be in place to at least stop further Federal subsidies of these highly erodible lands, that by capability class, should not be intensively cropped.

The Soil Conservation Society of America urges early enactment and implementation of this idea and we feel that the time has come for this legislation.

Second, with millions of acres temporarily diverted from producing certain commodities, we should quickly, if we possibly can, take advantage of every possible means of encouraging those land users who have highly erosive lands, that they are setting aside this year, to dedicate them to a long-term use that best fits their natural capabilities. Some have spoken of a voluntary long-term conservation reserve. The American Farm Land Trust has offered ideas along this line and there will be more details on this.

A properly implemented program in this regard could reduce cropland sheet and rill erosion by about 0.8 billion tons annually. This would be a one-third reduction of 1977 losses and it would be a dramatic start on the long-term land, nondegradation policy in this decade.

An eighth observation. The Soil Conservation Society of America, as I mentioned, founded in 1945 as a nonprofit scientific and educational association, is dedicated since its inception to promoting the science and art of good land use. Its 13,000 members worldwide include researchers, administrators, educators, planners, legislators, farmers, ranchers, students, and many others who have an interest in the wise use of land and related resources.

To this end, we seek through our Journal of Soil and Water Conservation, published six times a year, to educate people so that mankind can use and enjoy these natural resources forever.

For nearly four decades, we have been advocates that a large part of the soil conservation answer lies in a better understanding of the science and art of good land use. The key is how best to persuade the users of the land that the rate of annual soil loss depends primarily on the physical characteristics of the land itself and how each acre is used.

We are not original in this thinking. William Penn, in 1693, writing said, "We'd be happier if we studied nature more and natural things and acted according to nature, whose rules are few, plain, and most reasonable." There are many, many other people who have laid the groundwork for this.

A ninth observation. Every possible word has been written or spoken on these issues. We may be near the point of overkill with the data, alternative strategies, and the consequences of either action or inaction. Now this was supposed to be the decade for action, not more talk and planning. But recently, there has been a renewed attempt to further complicate the conservation issue and confuse the public with statements saying that land for agriculture is not an increasingly serious constraint in the coming decades; that soil erosion is not a serious problem.

These people feel that the Government is ill-equipped to produce sound assessments of long-run future trends concerning resources.

Their position is that resource and environmental problems will take care of themselves without help from the government, this, despite the fact that we will have a world population by the turn of the century of over 6 billion people.

We are concerned about the future quality of our natural resource base and are not salesmen of gloom and doom. We who would reduce or eliminate intramural bickering over facts and trends can help serve as arbiters for the people who do not have easy access to facts, data and scientific insights, and better understand the issues.

There are good acts on the books for conservation. Many have come over the years. Governments at all levels in varying degrees have promoted soil and water conservation. There have been billions of private and public moneys spent to cope with the man-caused soil loss and, for the most part, the practical and proven technologies are widely known and available.

There has been good progress, but for each step forward, we seem to fall back, perhaps even two steps.

Why do we have such difficulty solving this seemingly intractable problem? While I directed the Department's soil and water conservation programs delegated to the SCS and its great corps of career conservationists, we tried to carry out the laws of the land. But we never had adequate Federal resources to fully cope with all of the requests that were made voluntarily to the local conservation districts. This will probably not change too much in the future because we understand that resources will be limited. And soil and water conservation is a continuing task, as long as man manipulates the environment.

I do want to commend and have long commended those thousands of land users who are good stewards and strive to do more, with or without help from government.

Finally, relating to the RCA and what we now have heard recently labeled as PIK. USDA launched the soil and water conservation blueprint for the future. The administration's budget for this next fiscal year is well below the lower bound of $735 million per year.

Now, at the same time, we launched the payment-in-kind program. This is the most massive intervention of our Federal Government influencing the land use decisions of millions of individual producers to aline supply and demand of wheat, corn, rice, cotton, and grain sorghum, and to try to cut back on farm support budget costs that I have seen in my lifetime, and we've heard costs that range up to $21 million.

Yet, nowhere in the RCA document was there any reference to PIK. It's as though these two USDA programs for the land users came from two separate worlds. It is the most recent confirmation that commodity and conservation policy tend to run on separate tracks, sometimes in opposite directions.

Now this land use and production adjustment, although only temporary, will benefit soil conservation if properly implemented this year. It depends on how it's managed. There needs to be some oversight at the local level as to how these lands are being idled and what are the soil conservation uses.

But had RCA and PIK been tightly coupled, offered in tandem in planning and implementation, with the needed forethought and crosswalk, and had there been provisions for some of that land use shift to be long-term, the gains for soil and water conservation could have been dramatic. I hope we have not missed what appears to be a golden and perhaps once-in-a-lifetime opportunity, because PIK is apt to cost more than surplus grain and cotton and financial support subsidies. It could further damage the Government's credibility to act in a responsible manner and properly consider the public cost of any policy proposed in the face of budget deficits.

Mr. Chairman, I request that the cost of PIK information on pages 376 and 377 of part 8 of the USDA hearings before a House of Representatives Subcommittee on Appropriations for Agriculture, Rural Development, and Related Agencies that was released June 2, 1983, for use of the committee be made part of the record of the hearing.

[The information follows:]

COST OF PIK

Mr. WHITTEN. I understand there has been considerable difficulty so far in estimating the total cost of the PIK program because of all the variables involved. I would like you to provide for the record your current estimate of the ultimate cost of the PIK program in terms of the need for restoration of capital impairment to the Commodity Credit Corporation. You might also describe the primary factors involved in making your estimate. In addition, I would also like to have a copy of the agreement you are entering into with farmers to implement the PIK program.

We appreciate your appearance here today.

[CLERK'S NOTE.—The following information on the estimated cost of the PIK program was received on May 24, 1983.]

PAYMENT-IN-KIND PROGRAM

According to the Department's latest estimates (as of May 24, 1983) the payment-in-kind program (PIK) is estimated to reduce outlays, and thus the potential budget deficit, by $9 billion through fiscal year 1986. Under the program, the Government will give up assets (commodities) with book value of about $12 billion which it presumably could have sold back on the market to reduce Treasury borrowing at some point in the future. However, no one knows when this would have been possible. Massive sales would depress market prices and ultimately increase the cost of future farm programs.

Savings to the Government result from the combination of the favorable impact of PIK on the farm economy and reduced costs of maintaining commodity inventories. Income support (deficiency) payments are expected to be reduced by over $3 billion as a result of higher market prices from the PIK program. An additional $2 billion is expected to be saved by lower diversion payments. Over $3 billion in carrying costs will be saved due to the lower inventories.

It should also be noted that the President's budget assumed two years of PIK (crop years 1983 and 1984) and the passage of legislation to freeze target prices. Official budget figures have been based on this total proposal. Full implementation of the President's program would produce substantial savings in the near term and also in the longer term future as the agricultural economy benefits from the impact of these programs.

The following table summarizes the estimated impact of the President's program on CCC losses for the fiscal year 1983-1986 period. As indicated above, the President's program would produce additional savings well beyond 1986, but such estimates are difficult to quantify at this time. As always, it should be understood that CCC estimates are very volatile and are subject to change, as additional information is received. This table is the best information available as of this date.

ESTIMATED IMPACT OF PRESIDENT'S PROGRAM ON CCC LOSSES, FY 1983–1986

[In billions of dollars]

	1983	1984	1985	1986
Current Services for Commodities Included in PIK Program	$7.3	$6.7	$8.4	$8.4
Impact of PIK:				
PIK Payments	+2.8	+7.5	+1.5	
PIK Savings	−.2	−2.8	−3.5	−3.0
Impact of Freezing Target Prices		−.9	−1.9	−2.5
Net Impact of President's Program	+2.6	+3.8	−3.9	5.5
Estimated Losses for PIK Commodities, President's Program	9.9	10.5	4.5	2.9

[CLERK'S NOTE.—The following letter was sent to the Secretary of Agriculture on May 25, 1983, regarding the foregoing payment-in-kind (PIK) cost estimates:]

HOUSE OF REPRESENTATIVES,
COMMITTEE ON APPROPRIATIONS
Washington, D.C., May 25, 1983.

Hon. JOHN R. BLOCK,
Secretary, Department of Agriculture, Washington, D.C. 20250

DEAR MR. SECRETARY: I have reviewed the material provided to the Committee which represents the Department's estimate of the cost of the payment-in-kind program. I appreciate that PIK may be essential to the farm producer as you describe it. At the moment, because of the desperate financial fix he is in, he needs PIK for collateral to stay in business this year.

I feel this latest estimate is extremely misleading, as are all of the estimates prepared by the Department on the cost of the payment-in-kind program. Nowhere in your estimates have you included the cost of loss of our markets to our competitors who have expanded their acreage. This cost will be enormous. Nor do you mention the fact that Congress must appropriate funds to the Commodity Credit Corporation to pay for the assets of the CCC.

I believe the ultimate cost of the PIK program will be almost beyond belief. Not only will there be the cost associated with the almost $12 billion in commodities you plan to give away, but also the lost sales because of expanded foreign production will add billions more to the ultimate cost. These costs will be borne by the farmer, his suppliers and the government. You fail to recognize the loss to American industry and labor of a large part of their domestic market, or to government in the drop in dollar earnings in world trade. You fail to realize a failure to offer competitively is a most effective embargo.

Mr. Secretary, there is no substitute for offering our commodities for sale in world trade at competitive prices. The farmer benefits, the country benefits and the people of the world benefit. I hope you will use the Commodity Credit Corporation the way it was intended to be used when the Charter Act was passed by the Congress.

Sincerely,

JAMIE WHITTEN,
Chairman.

Mr. BERG. The public is only now beginning to read that farm policy program costs are going to be up 75 percent in fiscal 1983 over last year.

Even more confusing must be the plan for PIK campaign recently aired that States that selected wheat and cotton farmers under PIK will get to sell their commodities twice, to the Government and to the cash market.

The irony and the danger for improving soil and water conservation programs in the future is that the full costs of the present programs will fall due at the very time that the next generation of farm policy is being enacted. Soil conservation and its costs, unfortunately, as I mentioned, have always been postponable. Resource conservation legislation is attractive in the Congress. It helps pull through some of the other needs. But it is never entitled.

It nothing else, though, PIK proves again that the market cannot be consistently relied on for agriculture's needs, and that includes soil erosion reduction.

We must make more certain that farm programs, by design and action, buy more soil and water conservation than they do now. The Soil Conservation Society appreciated the opportunity to testify and we look forward to working with you in the future.

I would be pleased to handle any questions that you may have.

[The prepared statement of Mr. Berg follows:]

Prepared Statement of Norman A. Berg

PROGRAM AND POLICY CHOICES
IN
AGRICULTURAL CONSERVATION

Mr. Chairman, members of the Joint Economic Committee, as you have heard the testimony of the many excellent witnesses in the six hearings held since May 19, everyone must be impressed with the broad array of issues involved in forging future agricultural policies that will best serve everyone. Adding agricultural conservation and financing in the 1980's to these discussions as you are doing today and tomorrow, is most desireable. These two days however will further verify that there are no simple solutions to complex problems. however, "Post-PIK" policy must be considered while there is time, and we agree that "USDA doesn't have all the answers".

One would think that by now every possible word has been written and/or spoken on these issues. We may be near the point of overkill with the natural resource data defining the problems, alternative strategies for solutions to the problems, and the consequences of inaction and/or action related to the agricultural conservation problems here and abroad.

Recently though, there has been a renewed attempt to further complicate the conservation issue and confuse the public with statements from some critics saying that land for agriculture will not be an "increasingly serious constraint in coming decades" - that soil erosion is not a problem. They seem to fear information and analysis by governments about what the future holds saying that government is "ill-equipped" to produce sound assessments of long-run future trends concerning resources. Their position is that resource and environmental problems will take care of themselves, without help from government.

We who are concerned about the future quality of our natural resource base are not salesmen of gloom and doom. We who would reduce or eliminate intramural bickering over facts and trends can serve as intellectual arbiters so that people who do not have access to facts, data and scientific insights can better understand the issues - and know how to recognize and when to refute false information and conclusions. We are confident that a great majority want their policymakers to have better data and analytical capabilities, to be well informed and to expect government to act, where appropriate. Fortunately, Congress has - over several decades - enacted laws that are the solid foundation for a variety of conservation actions. Two acts of recent years are:

1. P. L. 95-192 - Nov. 18, 1977 to provide for furthering the conservation, protection and enhancement of the Nations soil, water and related resources for sustained use and for other purpose and,
2. P. L. 97-98 - Dec. 22, 1981 - Title XV - Subtitle A - stating that Congress hereby reaffirms its policy to promote soil and water conservation, improve the quality of the Nations waters, and preserve and protect natural resources through the use of effective conservation and pollution abatement programs.

While directing USDA soil and water conservation programs delegated to the Soil Conservation Service and its great corps of career conservationists, we were dedicated to carrying out the laws of the land. We never had adequate federal resources to fully cope with all the requests made voluntarily to their local conservation districts, from landusers and rural communities for assistance on their soil and water conservation problems. This will probably not change - as resources will always be limited and soil and waten conservation is a continuing task as long as man manipulates the environment. I do commend those thousands of landusers who are stewards of the land and strive to do more.

"Governments" at all levels -- in varying degrees -- have promoted soil conservation for fifty years; billions of private and public monies have been spent to cope with man-caused soil erosion, and for the most part practical and proven technologies are widely known and available for bringing soil losses down to tolerable levels. There has been good progress, but for each step forward, we seem to fall back two. Why do we still have difficulty solving this seemingly intractable problem?

Several related areas need to be discussed to best understand the alternatives available to those who decide policy.

First, the importance of accepting that farm policy is a driving force in the conservation of soil and water.

Second, the wealth of scientific information that is available about the quantity and quality of our land base.

Third, the relationship of the market place and the public interest.

Fourth, the National Program for Soil and Water Conservation - as the blue print for the future - will it work?

We will come away from this timely series of hearings with a better knowledge of agriculture -- our largest and most productive industry -- and its many problems. I have listened to many of the experts and how they answered your questions. I have studied the hearing transcripts. Two observations are very real:

First, soil conservation until this morning was seldon mentioned in the prepared statements. Farm policy, to the average listener of prior hearings, is structured to provide price and income protection for farmers, assure consumers an abundance of food and fiber at reasonable prices, continue assistance to low-income households, and for other purposes.

The major shaping of the next generation of farm policy - and so far nobody has suggested a radically different approach - will relate to surplus management, loan rates, target prices, disaster payments, marketing orders, increasing exports, P.L. 480, research, credit and rural development etc. etc. Soil and water conservation is far down the agenda - but increasingly is being placed in proper context with the other important actions.

Second, despite the desire and hope for a market-oriented agriculture, farmers and their governments, especially with their federal government, are linked inextricably. Reluctantly, this off-and-on marriage has finally produced at least a tacit, but fairly candid admission that though each (the government and the farmer) would prefer the next generation of farm policy to be one with no or a minimum of Government intervention, it's probably NOT TO BE. There will continue to be a role for government in agriculture and for soil and water conservation. The quest is to enact farm policies that are more compatible and directly supportive.

We agree that we should not stifle the viability of agriculture with too much government. However, soil conservation did not fair well in the open market-oriented fence-row to fence-row production campaigns of the early 1970s. The effect of years of dedicated land users using traditional soil conservation programs -- and the ancillary benefits of past farm policy -- that paid farmers to take land out of production to reduce agricultural output-almost disappeared during this past decade as farmers patriotically responded to the high export demands and consumer price concerns for agricultural goods. Producers then were caught in the rise of inflation level costs and weak global demand along with several other factors including two back-to-back record harvests after they had geared two of every five acres of cropland for output for foreign buyers. The three year crunch in the farm economy was, to say the least, also not conducive to investments for long term soil conservation. The appraisal of resource conditions and trends were disturbing and led to the Resource Conservation Act and a better understanding that the soil conservation aspects of farm policy have too often been a by-product. We feel the time is ripe for an integrated agricultural and conservation program -- one that takes advantage of the cycles of the farm economy to also deliberately do more to protect the Nation's soil.

There are those who will be reluctant to endorse this linkage and will label it "cross-compliance". By contrast we see these dual problems as a great challenge, but are optimistic that they can be met. This will result from governments will to act based on improved and scientific understanding of conservation problems facing the Nations farmers in this decade. There are many who want to assist you in any way they can.

The Soil Conservation Society of America (SCSA) founded in 1945, with over 13,000 professionals of every resource discipline as members, has, since its inception, been dedicated "to advance the science and art of good land use, with emphasis on the conservation of soil and water and related natural resources. Our Journal of Soil and Water Conservation, published six times a year, is world reknown for its excellent scientific reporting and thought provoking writings. A large part of the soil conservation answer lies in better understanding of the science and art of good land use. The key is how to persuade the land users that the rate of annual soil erosion depends primarily on the physical characteristics of the land itself, and -- how each acre is used. A majority of farmers are either blessed with land that is not highly erodible or they are taking the necessary conservation measures to reduce soil loss.

Based on the 1977 National Resource Inventory (NRI) we note that 32 percent of the acreage used for cropland (131.6 million acres) suffered annual sheet and rill erosion rates of less than 1 ton per acre. By contrast, those lands that are intensively used but based on their physical characteristics should be used to grow grass or trees contributed nearly one-fifth of the total sheet and rill erosion in 1977. Our priority concern, of course, is the high soil loss on some cropland. About 25 million acres -- 6 percent of the cropland -- accounted for 43 percent of the annual cropland sheet and rill erosion in 1977.

We will have better information when the results of the 1982 NRI are released. USDA has long had a Land Capability Classification System (I-VIII). It provides three major categories: capability unit, subclass, and class. It is based on the information derived from the Cooperative National Soil Survey. When properly interpreted, land can be labeled, by class, that is best suited long-term for use as forestland, rangeland, grass land for hay or pasture, or most importantly, land for productive, intensive cropping year after year. Land permanently covered with vegetation obviously will have lower soil erosion rates than croplands. Therefore, to the extent possible, government programs should require that land be used within its capability and treated in accordance with its conservation needs. The challenge is how to get it done and to have the method accepted in a free society. First, a program labeled the "Sodbuster" legislation sponsored by Senator William Armstrong, Rep. Hank Brown and many others has had hearings and should be in place to at least stop further federal subsidies for those highly erodible lands , that by capability class, should not be intensively cropped. SCSA urges early enactment and implementation of this idea whose time as come. Second, with millions of acres temporarily diverted from producing certain commodities we should quickly take advantage of every possible means of encouraging those land users who have highly erosive lands to dedicate them to a long term use (grass or trees) that best fits their natural capability. Some have spoken of a voluntary long term conservation land reserve. The American Farmland Trust (AFT) has offered ideas along this line. A properly implemented program could reduce cropland sheet and rill erosion by about .8 billion tons annually. This would be a one-third reduction of 1977 losses - a dramatic start on a long-term land non-degradation policy in this decade.

We know even these proposals to encourage farming within the land capabilities are not simple, because land use decisions and farming practices ultimately relate to the economics of soil conservation and the welfare of agriculture. Those who would solve the risk of continued soil degradation would identify and stop whatever reason triggers the process. But, in most cases, that reason is the way the farmers make their living. We should be testing the conservation provisions built into the 1981 Farm Bill but little has been done to implement them. Now perhaps honed by the conservation possibilities offered under the PIK program, there seems to be a new awareness of the need to key future federal farm programs to resource conservation. However, to translate that awareness into policy will require support beyond those who generally share a resource management, rather than a market place economic perspective on soil conservation. We look upon soil as a natural resource - at times mismanaged because its long term value is underestimated by the market place.

The Marketplace and the Public Interest

Traditional views of the marketplace, embodied in Adam Smith's "invisible hand" theory, suggest that, if left alone, the forces of supply and demand will provide an appropriate level of balance in our society. This view holds considerable currency today, simplistic though it may be, and in spite of the ubiquitous presence of external diseconomies affecting large portions of our population.

Although the nature of the relationship between natural resources (scil in particular), land users acting in the private sector, the public interest, and governmental roles to protect that interest is complex, it is clear that a symbiotic relationship does exist. The major soil erosion concerns for society, in a public interest sense are significant, yet at the same time diffuse. These concerns range widely, they include maintaining the long-run productivity of soils to ensure a stable source of food and fiber. Environmental quality is also a significant public interest concern resulting from soil erosion. Poor soil management practices by individual farmers lead to nonpoint water pollution affecting the health, public costs, and quality of life of others. Relationships between the community at large and the soil which provides an element of economic, social, and biological support are both numerous and dependent. These include:

1. Day-to-day food dependency relies on large areas of highly productive soil for agricultural products.

2. Economic livlihood of farmers, implement dealers and manufacturers, distributors, as well as the primary agricultural sales industry depends on the ability of soils to produce. It also depends on a significant amount of flexibility in crop application, which implies a soil and land reserve.

3. Costs of food and agricultural products to consumers are indirectly dependent on soil quality and stability.

4. Our nation's capacity to sustain an export capacity and maintain a favorable balance of trade is ultimately dependent upon the quality of our soil and the extent of area in good soils.

Soil's significance is therefore far reaching for our society. Though more indirectly than directly, it is intrinsically tied to our public interest.

Public Interest Roles for Soil Conservation

While it's clear that a wide range of approaches can be employed, and a wide range of factors involved in efforts to sustain the public interest in soil conservation, four areas of need deserve focus:

1. The need to clarify the problem of soil erosion and define it in terms of an affected public. The problem of soil erosion has been addressed in the public arena (not to mention on an individual basis by every concerned farmer) since the 1920's, when Hugh Hammond Bennett raised the conciousness of the agricultural community about the seriousness of the problem.

Many government programs have been designed to address the soil erosion problem but full public understanding of this problem and its long range implications for all people have largely gone undefined. This omission is a crucial ingredient for securing public support and resources.

2. The need to develop public-interest-oriented goals for soil conservation. A series of public and private goals for soil conservation are set forth in several documents. A National Program for Soil and Water Conservation sent to Congress by the President, in December 1982, lists six long-term conservation objectives and sets two national priorities reflecting a commitment by USDA to preserve the productive capacity of the nation's agricultural lands.

Professor Sandra Batie in her text Soil Erosion: Crisis in America's Cropland focuses on prevention of productivity losses, maintenance of farm income, improving water quality, controlling flood damage, and general environmental quality improvement.

Neil Sampson's Farmland or Wasteland text stresses that what is needed, clearly, is a new land ethic - forged from the twin concerns for the land's proper use and its proper care. We must begin - he says - to treasure the prime farmlands that have made us the world's richest Nation, keep them available for agricultural use, help farmers survive economically and environmentally so that they can profitably produce from them, and insist that they be used in such a manner that soil depletion is minimized.

3. The need to provide some form of interest group representation for a soil conservation constituency. There will be those who argue that this is now in place - is now performing satisfactorily and nothing more is needed. Yes, a variety of institutional arrangements , somewhat confusing to the public, have been created for soil conservation. Much of what serves as interest group representation is tied very closely to those institutions. As I observe the actors on this stage I increasingly sense that many believe that interest is not being represented with the good of the entire public in mind. A more specific entity for representation of the broad interests involved in soil conservation seems desirable.

4. The need to offer a strong degree of advocacy for implementation of soil conservation solutions. The diffusion of issues related to soil erosion has led to a piggy-back effect for advocacy of soil conservation. There is a need for some form of coalition advocacy for soil conservation that makes this concern a clear one, and one of distinctive concern in the public interest. Providing an attractive and stable basis for economic opportunities in farming is of course another major public interest concern. The task is to relate this to soil conservation. Market responsiveness to the public interest has traditionally required some form of financial or regulatory inducements by some level of government. While theoretically the marketplace can respond to meet needs of the public interest not readily identified as "profitable" an expectation for financial aid to respond to public interest had been escalating during the 50's, 60's and 70's. That expectation was fueled by federal government grants-in-aid intended as direct support for solution of

public interest problems, or for incentives for marketplace solutions to those problems.

The reality of today is that we are in a period of "cutback and shutdown" regarding the use of federal public funds to fuel marketplace incentive. Three problems encountered in applying marketplace solutions to public interest problems are:

1. Maintaining an appropriate sense of priority for public interest problems. This is difficult in marketplace approaches because of a lack of advocacy about the nature and severity of the problem.

2. Finding an appropriate market mechanism. Decisions about selecting an appropriate mechanism are difficult because of the plethora of untried approaches that deserve consideration.

3. Achieving results in a timely manner. Timelinees of market approaches tend to mismatch short-term economic over long-range goals.

While Chief of Soil Conservation Service I commissioned Louis Harris and Associates, Inc., to conduct a survey between October 19 and November 21, 1979, to determine public attitudes regarding conservation of soil, water, and related resources. During the survey, in-person interviews were held with 7,010 people who represented a cross-section of the Nation's adult population.

Some of the survey's major findings were:

- Half of all Americans consider misuse of our soil and water resources to be a serious problem.
- Fifty-three percent consider the loss of good farmland a serious problem.
- People see conservation as a joint public and private responsibility. They think that the burden for conservation should be shared fairly between government and farmer or other landowner.
- By seven to one, Americans think that federal action to protect farmland from erosion is a proper role for government.

- More than eight of ten Americans are rated moderate-to-high on a conservation ethic scale, believing conservation is important for the country.
- More than three-fourths of Americans feel we have not reached the point in soil and water conservation efforts that we should be more concerned with holding down costs than with completing the work that remains.
- The public consistently prefers allocating a greater share of soil and water resources to agriculture -- specifically to food production-- rather than to competing housing, industry, energy, or recreation.
- Americans support the concept of small family farms and support federal policies aimed at preserving and increasing them. People understand, however, that most of the food grown in this country is produced on large farms.

These views were further confirmed in two massive public participation (1980 and 1981) RCA activities. The message comes loud and clear-- farmers and urban dwellers are aware of -- are concerned about -- continued serious soil erosion-- and the off-site impacts on the quality of life -- long range and for the yet unborn. There was a good understanding that:

1. Implicit to the private realm is the notion of individual right, personal choice, and freedom. 2. Implicit to the public realm is the goal of minimizing adverse effects of indirect and unintended consequences both on individuals and the communtiy at large and 3. that these premises are in constant search of balance in any society.

The challenge to policymakers is to devise and quickly implement programs that will protect farmers in the low spots, and protect the consumers in periods of tight supply, and still be acceptable to the tax payer who are aware that soil is the basis for the production of our food,our clothing, and our shelter; that it is an essential natural resource that is both finite and fragile; that in most places we stand on six inches of topsoil, upon which the ultimate fate of our society depends.

A final observation is that issues of equity, need, and awareness of conservation problems are difficult under any approach, but that they are most difficult under marketplace solutions. The goals that have been established and the **priorities** set in RCA make sense. It's the details of doing it that boggles the mind. Based on my experience, I endorse:

A. That the **President's** letter of December 21, 1982 to the Speaker of the House of Representatives and the President of the Senate and his Statement of Policy should be part of the public record of these hearings. I have attached it to my statement.

B. The Appraisals, Part I (March, 1981) Soil, Water, and Related Resources in the United States: Status, Conditions, and Trends, and Part II (August, 1981) Analysis of Resource Trends, presents data that local, state, and federal interests can use in evaluating existing soil and water conservation programs and policies and in planning, enacting, and implementing more effective policies and programs. They also present results of department analyses of the data, the demands on the Nation's soil, water, and related resources projected to the year 2030, and presents alternative strategies for developing and maintaining effective conservation programs.

The 1982 NRI data, due to be released later this summer, should be even more helpful. The primary sample units (PSU's) are five-fold (1,000,000) from 1977.

C. The key features of the recommended National Program for Soil and Water Conservation: In my endorsement I would amplify as follows:

1. National conservation priorities are reducing soil erosion, conserving water, and reducing upstream flood damages. There will continue to be concerns that must be met relating to important farmland retention, salinity and water quality impaired by nonpoint sources, organic waste management, rangeland and

forestland improvement and management, fish and wildlife habitat, sediment control and storm water management in suburban developments and energy production and conservation.

2. Cost-effective conservation measures obviously gives major emphasis to conservation tillage. There will continue to be lands that will require specified structural conservation measures for adequate soil erosion control.

3. Targeting is an excellent plan -- if at the same time USDA maintains an adequate nation-wide base program.

4. Matching grants should be implemented based on Title XV, Subtitle D, of the Agriculture and Food Act of 1981 (PL 97-98).

5. Conservation pilot projects should be implemented based on Title XV (PL 97-98).

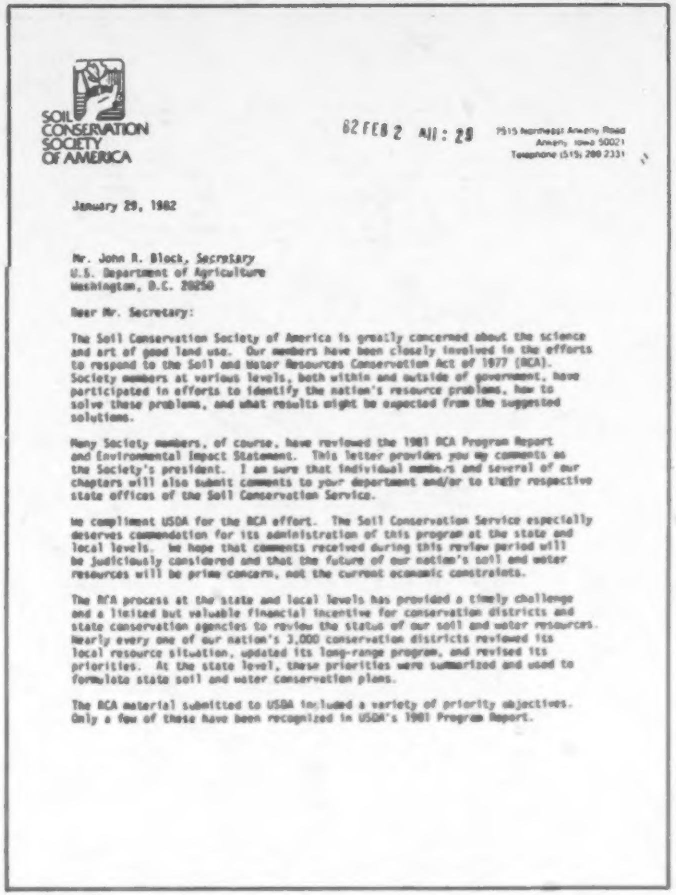
6. Intergovernmental cooperation needs continued oversight to ensure success.

The Resource Conservation Act of 1977 process finally produced "the National Program for Soil and Water Conservation" last December. Even if it were to be funded at the upper Bound (and the Administration's budget is below the Lower Bound of $735 million per year set for FY 1984 through FY 1988) their soil and water conservation programs would reduce erosion by less than one percent per year. That same Administration -- at virtually the same time -- launched the payment in kind(PIK) program.

This most massive intervention of our federal government influencing the land use decisions of millions of individual producers to align supply and demand of wheat, corn, rice, cotton, and grain sorghum and to staunch farm support budget costs that are expected to hit $21 billion this year was launched with a soil conservation halo . If nothing else, though PIK proves again that the market cannot be consistently relied on for all of agriculture's needs and that includes soil erosion reduction. Yet nowhere in the RCA document is there any reference to PIK. It's as though these two USDA offers to land users came from two separate worlds. It is the most recent confirmation that commodity and conservation policy run on separate tracks sometimes in opposite directions.

The 1983 land use and production adjustments, although now only temporary, should benefit soil conservation this year. It depends upon how it is managed. I understand there will be some oversight at the local level on soil conserving uses of the idle lands. Had the RCA and PIK been tightly coupled, offered in tandem in planning and implementation with the needed forethought and crosswalk and had there been provisions for some needed land use shifts to be long-term, the gains for soil and water conservation would have been dramatic in this decade. Some will say its not too late and we should not nit-pick PIK - I hope we have not missed what appeared to be a golden - once in a life time opportunity. PIK is apt to cost more than surplus grain and cotton, and support subsidies. It could further damage Government's credibility to act in a responsible manner, and properly consider the public cost of any policy proposed in the face of record budget deficits. We must make more certain, than in the past, that farm programs, by design and action, buy more soil and water conservation than they do now.

The SCSA appreciated this opportunity to testify. We look forward to working with you in the future. We will be pleased to respond to any questions. We'll help you in any way that we can as you shape the next generation of farm policy that will take us through this decade.



SOIL
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82 FEB 2 AM 11: 28

January 29, 1982

Mr. John R. Block, Secretary
U.S. Department of Agriculture
Washington, D.C. 20250

Dear Mr. Secretary:

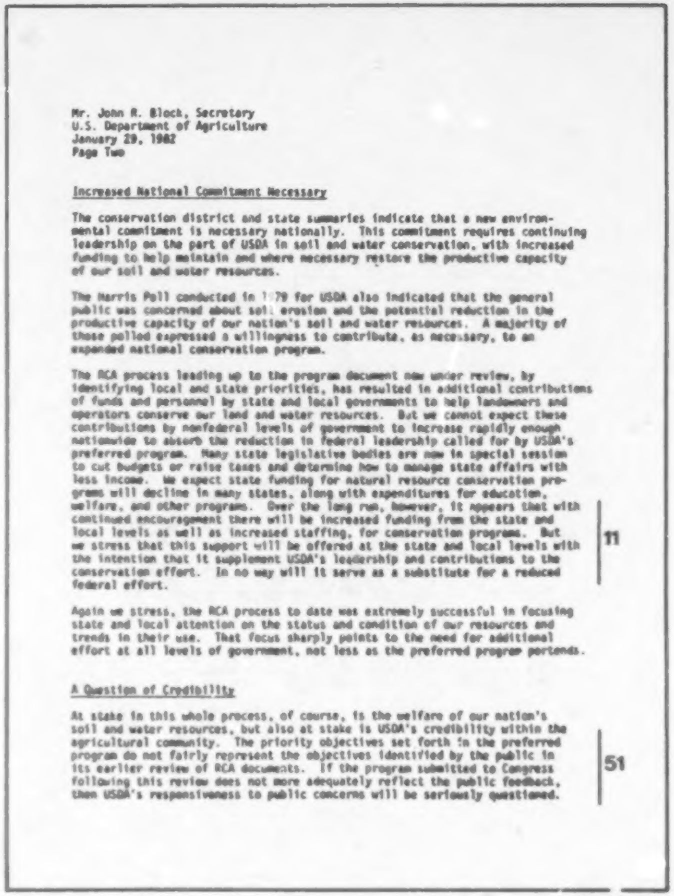
The Soil Conservation Society of America is greatly concerned about the science and art of good land use. Our members have been closely involved in the efforts to respond to the Soil and Water Resources Conservation Act of 1977 (RCA). Society members at various levels, both within and outside of government, have participated in efforts to identify the nation's resource problems, how to solve these problems, and what results might be expected from the suggested solutions.

Many Society members, of course, have reviewed the 1981 RCA Program Report and Environmental Impact Statement. This letter provides you my comments as the Society's president. I am sure that individual members and several of our chapters will also submit comments to your department and/or to their respective state offices of the Soil Conservation Service.

We compliment USDA for the RCA effort. The Soil Conservation Service especially deserves commendation for its administration of this program at the state and local levels. We hope that comments received during this review period will be judiciously considered and that the future of our nation's soil and water resources will be prime concern, not the current economic constraints.

The RCA process at the state and local levels has provided a timely challenge and a limited but valuable financial incentive for conservation districts and state conservation agencies to review the status of our soil and water resources. Nearly every one of our nation's 3,000 conservation districts reviewed its local resource situation, updated its long-range program, and revised its priorities. At the state level, these priorities were summarized and used to formulate state soil and water conservation plans.

The RCA material submitted to USDA included a variety of priority objectives. Only a few of these have been recognized in USDA's 1981 Program Report.



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Increased National Commitment Necessary

The conservation district and state summaries indicate that a new environmental commitment is necessary nationally. This commitment requires continuing leadership on the part of USDA in soil and water conservation, with increased funding to help maintain and where necessary restore the productive capacity of our soil and water resources.

The Harris Poll conducted in 1979 for USDA also indicated that the general public was concerned about soil erosion and the potential reduction in the productive capacity of our nation's soil and water resources. A majority of those polled expressed a willingness to contribute, as necessary, to an expanded national conservation program.

The RCA process leading up to the program document now under review, by identifying local and state priorities, has resulted in additional contributions of funds and personnel by state and local governments to help landowners and operators conserve our land and water resources. But we cannot expect these contributions by nonfederal levels of government to increase rapidly enough nationwide to absorb the reduction in federal leadership called for by USDA's preferred program. Many state legislative bodies are now in special session to cut budgets or raise taxes and determine how to manage state affairs with less income. We expect state funding for natural resource conservation programs will decline in many states, along with expenditures for education, welfare, and other programs. Over the long run, however, it appears that with continued encouragement there will be increased funding from the state and local levels as well as increased staffing, for conservation programs. But we stress that this support will be offered at the state and local levels with the intention that it supplement USDA's leadership and contributions to the conservation effort. In no way will it serve as a substitute for a reduced federal effort. 11

Again we stress, the RCA process to date was extremely successful in focusing state and local attention on the status and condition of our resources and trends in their use. That focus sharply points to the need for additional effort at all levels of government, not less as the preferred program portends.

A Question of Credibility

At stake in this whole process, of course, is the welfare of our nation's soil and water resources, but also at stake is USDA's credibility within the agricultural community. The priority objectives set forth in the preferred program do not fairly represent the objectives identified by the public in its earlier review of RCA documents. If the program submitted to Congress following this review does not more adequately reflect the public feedback, then USDA's responsiveness to public concerns will be seriously questioned. 51

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Limited Priorities

We recognize the importance of the priorities listed in USDA's preferred program. However, we believe that the priorities are too limited, and they are causing concern at both the state and local levels, especially in areas where these priorities (serious soil erosion and upstream flooding) are not major problems. Among the important conservation problems not included are pasture and range improvement, water supply management, and forestry improvement. 8

We applaud the fact, of course, that soil erosion is given highest priority in the preferred program, but there is one important aspect of the erosion problem that is not addressed. This concerns the amount of soil loss that occurs in relation to the quantity of topsoil available. Soil loss at a relatively low rate per acre on a shallow soil may pose a much more severe problem from the standpoint of productivity maintenance than a higher rate of soil loss on a deep soil. Evaluating the quantity of topsoil available versus the quantity being lost may be a critical concern, particularly in areas where there is less topsoil to lose.

USDA also needs to direct more effort toward the control of agricultural land conversion. Continued production of food and fiber hinges on the retention of our prime and unique agricultural soils. Protection of agricultural land, therefore, deserves the same consideration as erosion control. Once farmland is converted to nonagricultural uses, it is, in most cases, gone forever. 30

Is a New Committee System Needed?

The proposals for local conservation coordinating boards and a state conservation coordinating board would require a maturation process to be as effective as the current boards and committees. Further, this new committee approach is viewed by some as a way for USDA to obtain greater control of state and local soil and water conservation programs from the Washington, D.C., level. I hope this was not the intent.

New boards are not needed. There presently exists a local administrative system that has proven successful for many years. Conservation districts have been recognized as a local, legal state subdivision, with locally elected or appointed officials responsible for setting local conservation priorities and giving guidance to a host of cooperating agencies and to Soil Conservation Service technicians. The leadership of these locally elected people has been the key to encouraging landowners and operators to plan and implement needed conservation programs. Their programs are designed to identify local problems and set priorities for solving them. In addition, county ASC committees are locally elected to administer the federal cost-share program. These two grassroots bodies have worked in concert, effectively accomplishing conservation objectives. 35

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Turf Battle

Should these coordinating committee proposals be pursued, we suggest that a very serious and counterproductive turf battle could evolve that would disrupt conservation efforts at the state and especially at local levels.

Leadership Coordination

If additional coordination is needed in some areas, then those responsible for giving leadership to this coordination should extend efforts to see that it is accomplished. USDA could lend support to this by offering limited grants for training and coordination to state conservation agencies, grants similar to those made available through the RCA process. USDA could also give this support by insisting that USDA administrators coordinate their agencies' efforts closely at the state and local levels with the efforts of all other agencies concerned with soil and water conservation.

Coordination of USDA Programs

Coordination of USDA programs is a long overdue objective and one that is strongly supported by many people. Conservation and price stabilization efforts within USDA have often been contradictory. Under one program, farmers are told to "plant fencerow to fencerow" without regard for soil capability. Other conservation programs provide cost-sharing and technical assistance to farmers who are willing to protect and restore marginal land with critical area seedings and other practices.

Block Grants

We oppose the block grant proposal if funding for these grants is to be taken from existing programs. We emphasize that existing programs are not now adequately supported. New funding must be made available if this effort is to be successful. Additional reductions will severely limit the present, valuable national soil and water conservation effort. 13

Targeting

Targeting is supported only if new funding is available. Also, national targeting should not be limited to the few preferred program objectives. State priorities should also be considered in some instances. This might include rangeland improvement, water conservation, improvement of forest lands. 20

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conservation of irrigation water, or other priorities identified by state and local areas. We suggest that this special emphasis be supported by new funding and program capability as suggested in the Special Areas Program contained in the 1981 Farm Bill.

Priorities

We suggest that priorities be established on a problem basis rather than by region or area. If soil erosion is a national priority, then it should be attacked throughout the nation where it is the priority of the state and conservation district, not in just a few selected areas where it is a regional issue. 8

We support your recommendation for basing cooperative actions on agreements between each governor and the secretary of agriculture. However, we assume that this has been done in the past by USDA working with the governor appointed and legislatively approved (or elected) state conservation agency. In addition, we hope that such a cooperative agreement does not dilute the assistance preferred under the memorandum of understanding between the secretary of agriculture and each conservation district.

We are pleased to see the recommendation that cost-efficient conservation measures should be emphasized. However, we must point out that there are instances where the economic benefit is difficult to establish and cost effectiveness in terms of long-term agricultural productivity should be the goal rather than dollar cost efficiency. 53

Coordination

We strongly encourage and continually work toward closer cooperation and budget coordination among USDA agencies, but we do not agree that this must be done with the new coordination boards described. As mentioned, this can be accomplished with additional leadership and emphasis where needed under existing programs through the presently established state and local agencies working with the appropriate USDA representatives.

Tax Incentives

We support continued consideration of tax incentives as an inducement to increased use of conservation systems. However, we suggest that Congress may need to hold oversight hearings or pass clarifying legislation to make sure that the intent of Congress is carried out and that the Internal Revenue Service adopts rules supporting congressional objectives of increasing conservation on the land that serve as an incentive to landowners and operators to apply conservation measures.

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Conservation Systems

We support emphasizing USDA assistance to farmers and ranchers for planning and installing conservation systems. However, if the present USDA soil and water conservation programs are reduced by transferring resources to targeting and grants, this cannot be done. Many conservation districts are presently saying that they now lack adequate technical assistance for planning and can give only limited and inadequate follow-up for installation of planned conservation measures. Growing state and local funding and personnel furnish considerable support to this effort but will not be able to fill the need that would exist if targeting and grants are implemented as proposed in your preferred program.

Farmers Home Administration loans supported by a conservation plan are a logical requirement, especially where funds are to be used for a soil and water conservation program. However, if the preferred program were to be implemented, this requirement could seriously delay the FmHA loan program because many conservation districts do not now have adequate SCS technical assistance to prepare conservation plans in a timely manner. We find that this is not a new proposal because many FmHA administrators have had a long-time practice of asking loan applicants to obtain a conservation plan in order to make the best use of their loan and personal funds. This type of action needs broader support and implementation throughout the country, however.

Research and Education

Targeting of research and educational services toward solving conservation problems that impair agricultural productivity is logical and strongly supported. Here, again, we anticipate that additional funding may be necessary to accomplish this objective. However, we feel it should not be done by robbing from another important USDA conservation budget. 24

There are limited research results during the past ten to fifteen years that answer questions pertaining to equipment usage, chemical applications and rates, management techniques, effect of residues on different soils, etc. It was precisely during this time period that farmers changed equipment size, rotations, types of chemicals, and management styles. No firm recommendations are available to the farmer wanting to use conservation tillage other than "try it on 5 or 10 acres and see if you can adjust to overcome problems."

Pilot projects to test new conservation methods are supported, based on additional appropriations and adequate recognition of the support for the pilot project by local sponsors and the assurance that the project is directed at solving locally identified conservation problems.

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Evaluation and Analysis

Evaluating and analyzing conservation programs is necessary, but we urge that this be kept to a reasonable level. We receive many reports that there is too much USDA staff time given to evaluation and data collection and that this takes away from conservation planning and implementation. We continually hear from conservation district boards who say their technicians spend too much time on data collection, analysis, and planning and on meetings discussing these items. The RCA has determined the status, condition, and trends of the nation's agricultural capability very effectively. It assesses the national and worldwide need for food and fiber in terms of this nation's long-term productive capacity. It suggests programs that were developed with more of a view of today's realities rather than the vision necessary for sustained productivity levels, more of a view of administrative inequities than the recognition of a well-respected and practiced organizational relationship.

Continued National Leadership

We believe that it is imperative that USDA continue to offer an adequate base level of national leadership in soil and water conservation. We are concerned that the preferred program, with reductions in the base toward targeting, block grants, and other areas, would result in inadequate technical and financial assistance in areas outside of targeted areas and in states where the block grant matching funds were not available, for whatever reason. 33

Funding for Soil and Water Conservation

We again reiterate that we must have a greater federal commitment for the conservation of our basic natural resources. Our nation's leaders need to consider our soil and water resources and our agricultural productivity as important to the nation's defense--just as important as airplanes, missiles, and submarines. I point again to the Harris Poll indicating the public's concern and willingness to pay for such a program.

The current federal expenditure of less than $5.00 per American per year on USDA's soil and water conservation programs is inadequate. The expenditure of one dollar for conservation programs out of each seven hundred expended by the federal government is shortsighted and will result in increased food costs in the future. The priority ratio of one-seventh of one percent has dropped each year. The total budget for the United States keeps rising, while funds for conservation programs continue declining. 16

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Source of Funding

SCSA's *Journal of Soil and Water Conservation*, in the May-June 1981 issue, featured a viewpoint titled "A Conservation Tariff" by Dr. Wesley D. Seitz, a professor of agricultural economics at the University of Illinois. Dr. Seitz suggested a tariff on agricultural exports. Export of agricultural products is very important and desirable, both to support farm income and to maintain the balance of trade with other countries. However, in many instances our cropland is suffering serious erosion, and we are accused of exporting our soil resources. A tax on these agricultural exports to be paid by the receiving country would seem an appropriate item to consider. 53

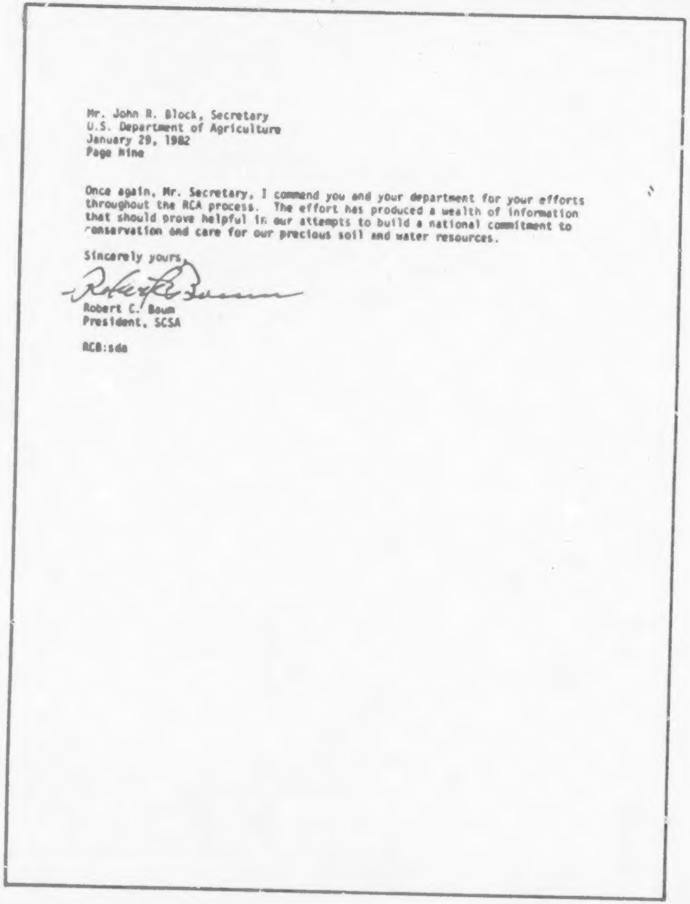
Long-term Agreements

We strongly support the proposal for long-term agreements between USDA and farmers or ranchers. This approach has proved to be an effective way to get conservation on the ground, witness the very popular and successful Great Plains Conservation Program. A program based on long-term agreements and funded with new money--not money coming from our nation's existing conservation programs--is a logical way to emphasize and draw greater attention to serious conservation problems. Multi-year funding must be available, however, so that long-range planning can be accomplished.

Major Changes Needed

The Resources Conservation Act has great possibilities if major changes are made by USDA before it is submitted to Congress or, if not, by Congress itself. The two most needed changes are a national conservation commitment and a new, higher level of funding to show a greater concern for soil and water conservation by this nation. These actions should include the recognition of and support for the delivery system that has given successful leadership to our conservation programs for many years.

It is unfortunate that the political process has resulted in the preparation of a program that is limited to a predetermined budget level. USDA should have presented the status of our nation's soil and water resources, recommendations on how to solve these problems, and the results of these solutions as requested by Congress. This was the purpose of the resource studies and state and local priorities prepared under the RCA process. Congress could then determine the level of national effort that would be supported by their constituents and that is necessary to protect the productivity of our soil and water resources. 10



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Once again, Mr. Secretary, I commend you and your department for your efforts throughout the RCA process. The effort has produced a wealth of information that should prove helpful in our attempts to build a national commitment to conservation and care for our precious soil and water resources.

Sincerely yours,

Robert C. Baum
President, SCSA

RCB:sda

COPY

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release December 21, 1982

TEXT OF A LETTER FROM THE PRESIDENT TO THE SPEAKER OF THE HOUSE OF REPRESENTATIVES AND THE PRESIDENT OF THE SENATE

December 21, 1982

Dear Mr. Speaker: (Dear Mr. President:)

I am pleased to transmit a Statement of Policy, an appraisal of this Nation's soil and water resources, and the Secretary of Agriculture's program for departmental conservation activities as required by the Soil and Water Resources Conservation Act of 1977.

The Secretary of Agriculture's program provides important guidance for the near and longer term management of the Nation's soil and water resources. The wise use of these resources will assure continued availability of food and fiber to meet domestic and world needs. My Statement of Policy provides further guidelines for implementation of the recommended program.

The Secretary's program is based upon findings developed from extensive surveys and evaluations of the current state of this Nation's soil and water resources. It is designed to correct identified problems through targeting Federal assistance to priority problem areas. It also calls for a greater role for State and local governments for the conduct of programs to assist private landowners in solving resource problems to protect the long-term productivity of this Nation's soil and water resources. The documents which are being transmitted to the Congress today will be helpful in your consideration of soil and water conservation policies, programs, and budgets.

I look forward to working with the Congress as you review these documents and my Statement of Policy in the coming months.

Sincerely,

RONALD REAGAN

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STATEMENT BY THE PRESIDENT

Today I am transmitting to the Congress this Statement of Policy for planning, implementing, and allocating resources for the soil and water conservation programs of the U.S. Department of Agriculture between now and 1987. This is required by Section 7(a) of the Soil and Water Resources Conservation Act of 1977, Public Law 95-192. Accompanying this statement are other documents required by this Act: Parts I and II of an Appraisal of the condition and trends of soil, water, and related resources in the United States and a Program and Environmental Impact Statement containing the program that has resulted from this appraisal.

These studies show the condition of the soil and water on two-thirds of America's land -- the rural non-federal land of the United States. This land totals 1.5 billion acres, and most of it is privately owned. It includes the farms, ranches, and private forests where almost all of our food and natural fibers and much of our pulp and timber are produced.

The natural resources on our rural lands are vital to the present and future welfare of the American people. The soil and water on these lands are basic to the production of food and fiber for domestic and world needs. Maintaining the productivity of these resources is essential to American agriculture and to the health of the Nation's economy.

American agriculture has achieved the greatest record of production in the world. A free market economy, mechanization, research, adequate capital inputs, fertile soil and water management have contributed to that record. These factors and others have generated an agricultural system that not only provides a varied and inexpensive supply of food for U.S. consumers but also feeds a significant part of the world's population.

Despite this unsurpassed record, however, the Appraisal reveals that inadequate resource management in some areas is damaging our soil and lowering the quality and quantity of our water resources. Soil erosion, for example, was reduced by soil conservation practices in the decades following the Dust Bowl of the 1930's. Now, soil erosion appears to be increasing again as we have made more rural land into cropland, particularly for corn, soybeans, and other row crops to meet the growing export demand. While about one-third of America's cropland is currently experiencing soil erosion from wind and water at rates which threaten the long-term productivity of the land, about 54 percent of all sheet and rill erosion and 89 percent of the excessive erosion of this type occurs on about 10 percent of the Nation's cropland (41 million acres). The condition of our grazing land has been improving steadily since the 1930's, but more than half is still in fair to poor condition. Responding to their own incentives, private landowners in many cases have introduced practices and improvements to control erosion.

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Agriculture is by far the Nation's biggest user of water, and water is being used -- and wasted -- in greater amounts than ever. In some parts of the West and Great Plains, groundwater is being used to irrigate crops faster than it is being replenished. Damages from upstream flooding are expected to increase in the years immediately ahead, largely because people continue to build on land subject to flooding.

Federal Conservation Programs

Programs to deal with soil and water resource problems were begun by the Federal Government about 50 years ago. Research programs to focus on soil erosion began in the late 1920's, and soil conservation programs were begun in the Dust Bowl years of the 1930's. Since then, many Federal, State, and local government agencies have carried out programs to protect, conserve, and improve soil and water resources, usually in cooperation with individual landowners.

Some 27 conservation programs, involving conservation research and education, technical assistance, cost-sharing and loans are administered by 8 agencies of the Department of Agriculture. Some of these programs, while popular with farmers and ranchers, do not clearly address the Nation's most critical soil and water resource problems. Further, after nearly half a century of Federal conservation assistance programs, a substantial number of farmers have not applied needed conservation measures. Too much soil continues to erode at rates that threaten productivity and impair water quality. Too much water is not efficiently managed, resulting in a threat of water shortages. Too much land is subject to excessive flood damages.

Appraisal of Alternative "Futures"

The Appraisal examines the impact on available cropland through 2030 of several alternative projections of domestic and foreign demand for agricultural production, and alternative rates of growth in agricultural productivity. Under a number of projections of increased demand and growth in productivity, the existing farmland base can provide the necessary production by the year 2030 without significant real price increases or adverse impacts to the land. Under some of the more "extreme" projections with high projected demand and low growth in productivity out to 2030, additional cropland would be required. Furthermore, there could be significant increases in the cost of agricultural production as well as increases in cropland erosion.

The proposed program is not predicated on either the most optimistic or pessimistic assumption about the future. Instead it is designed to accommodate a wide range of uncertainty in future agricultural production possibilities.

The Appraisal recognizes that soil and water conservation management is needed to counteract adverse impacts on this Nation's soil and water resource base, especially if a "high" demand for agricultural products is projected over the next 50 years.

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The Appraisal makes it clear that some changes in Federal soil and water conservation programs will be necessary to provide protection for the Nation's soil and water resources on non-federal land. Simply increasing Federal contributions to soil and water conservation is not the answer to our resource problems. Stewardship of the land is primarily the responsibility of the individual landowner. The marketplace generally determines what resources the individual will devote to the management of his land and water. The role of the Federal Government in promoting soil and water conservation is therefore subject to limitations imposed by economic conditions and the individual landowner's willingness to cooperate. The most important contribution that this administration can make to the conservation effort is to redirect current conservation programs and develop fresh approaches to solving the resource problems that continue to threaten the long-term productivity of our soil, water, and related resources. The program effects this redirection and provides for these fresh approaches. It will be the new benchmark for budget proposals and planning of all conservation programs in the Department of Agriculture.

The Recommended Program

The recommended program includes the following key features:

1. National conservation priorities. The program for the first time sets clear national priorities to guide Federal conservation efforts. The top priorities are reducing soil erosion, conserving water and reducing upstream flood damages.

2. Development and promotion of cost-effective conservation measures. The program encourages development and adoption of conservation measures, that are most cost-effective in reducing erosion and solving other resource problems.

3. Targeting. The program calls for targeting an increased share of Department of Agriculture resources -- people and dollars -- to critical problem areas where the need for conservation is greatest. It also targets Department of Agriculture Research and education efforts toward the solution of those soil and water problems that impair agricultural productivity and cause permanent damage to basic resources. Targeting will take no more than 25 percent of total conservation funds and will be phased-in over a five-year period, adding 5 percent a year.

4. Matching grants. The program provides matching grants to encourage local and state governments to participate more fully in planning and implementing conservation programs.

5. Conservation pilot projects. The program calls for undertaking pilot projects to test new conservation methods and incentives to help farmers and ranchers practice conservation effectively and at reasonable cost.

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6. Intergovernmental cooperation. The program will aim for improved coordination among the various Federal, state, and local agencies with conservation responsibilities. It will foster closer cooperation and coordination within the Department of Agriculture itself and among the eight agencies of USDA with responsibilities for conservation programs.

These features and others are described and evaluated in detail in the RCA Program Report and Environmental Impact Statement. Since they make so many significant changes in previous Department of Agriculture conservation programs, the Department measured public reaction to them in 1980 and 1981. Nearly 83,000 people commented on the latest draft, including Members of Congress and the Governors of 37 States, Puerto Rico, and Guam. More than half the respondents were farmers or ranchers. Comments received have been studied carefully and considered in preparing the final program document.

Budgeting Policy

It is my intention that the Department of Agriculture manage its soil and water conservation programs as efficiently as possible. This includes eliminating overlap among programs and reducing instances in which one program conflicts with the aims of another.

I anticipate that my future budget proposals will fall within the bounds of the recommended program. Funding for conservation programs, however, will necessarily be considered in each year's economic and fiscal context. The demands placed on our financial resources by other national goals and interests must also be weighed. Consideration of those competing demands each year could make it necessary for this Administration to propose a conservation program budget less than the proposed lower bound. I anticipate that State and local governments, as they assume more significant roles in conservation program design and management, will contribute a larger share of needed funds for conservation.

Conclusion

I believe the process introduced by the Soil and Water Resources Conservation Act of 1977 is useful. The Appraisal and Program have been major steps in developing a sound planning process for the Department of Agriculture's soil and water conservation program. They provide a long-needed picture of the status of soil and water resources and the projected demands on those resources, and a realistic strategy for the Federal Government to follow in helping to manage, conserve, and improve those resources to meet national needs and goals. It is my belief that this strategy will result in a significant improvement in the effectiveness of USDA conservation programs.

I commend the Secretary of Agriculture for his Department's efforts in preparing the Appraisal and Program and for his responsiveness to the Soil and Water Resources Conservation Act of 1977.

# # # #

Senator JEPSEN. Excellent, Mr. Berg. About as complete a dissertation on the subject as I've heard. I mean that. Thank you.

Robert Gray, director of policy development, the American Farmland Trust.

STATEMENT OF ROBERT J. GRAY, DIRECTOR, POLICY DEVELOPMENT, AMERICAN FARMLAND TRUST, WASHINGTON, D.C.

Mr. GRAY. Thank you very much, Mr. Chairman, members of the committee. I appreciate the opportunity to testify this morning representing the American Farmland Trust, to present to you the results of an analysis that the American Farmland Trust has conducted for the past year on soil conservation programs.

I know, Mr. Chairman, that you have heard from some members of our steering committee, specifically testimony and aims recently, about some of our findings of the American Farmland Trust. I think what I would like to talk to you about this morning is this committee, obviously, has been looking for answers to some of these problems. That's the purpose of these hearings, to come up with solutions. We are at the very end of this project about to release our report and I would like to speak to you and the members of the committee this morning about some of the solutions that we propose.

I think that we have clearly had an opportunity now to solve the soil conservation problem, at least to substantially reduce erosion over a fairly short period of time and at the same time, complement the problems that the farmers are having economically today in terms of depressed prices and surpluses. So I am going to speak in that vein.

I would like to just back up for a moment and mention that part of our analysis included, of course, looking at all aspects of soil conservation programs, including what State and local governments are doing. But we also look very closely at the cost sharing program of the Federal Government, the technical assistance program. And we also talked to over 700 individual farmers in six major farm States. We conducted a 1-hour indepth interview with those farmers and we asked them about what they were doing, what they were not doing with soil conservation, what they thought about various soil conservation programs, including Federal policies, not only current policies, but proposed future policies.

So we have all of that kind of background material to draw on, including our own analysis of the information that we had available from USDA.

So I am going to proceed with that background as far as our analysis is concerned and then talk about what we think some of the solutions are.

One of the major findings, of course, and I think that this is probably not surprising, but it really has never been detailed to the extent that we are going to detail it in our report. And that is that erosion is very, very concentrated. In other words, some of the most severe erosion is very concentrated. I would like to call the attention of you and other members of the committee to the last two pages in my prepared statement; there are two charts. As a matter of fact, if I can step to the chart over here, I'd like to speak specifically about that.

As you can see, there are, in a number of States, and we don't include Maryland in this listing, but if we had Maryland here, the same would hold true. I'll give you an example. In Iowa, in 3½ million acres, which represents 11 percent of the total in agriculture and in the State of Iowa, over 53 percent of the erosion occurs on that agricultural land.

So erosion in all States, as you go down the list, including Illinois, Missouri, some of the key agricultural States in the country, shows that erosion is concentrated and a small percentage of it is causing a great deal of the problem.

Now that's not to say we don't have severe erosion problems on a lot of our other good cropland. But we have brought a lot of cropland into production in recent years which has really aggravated this whole situation.

And second, what I want to show here, and I think this even shows it more graphically, this area [indicating], green, yellow, and red on this side of the graph, shows the current land in row crops and small grains as of 1977. It also shows, to the extent on that acreage, the amount of erosion that was occurring.

Now you can see as you work to the right of the graph here, which is the last graph in my prepared statement, you can see this area, the red area that we have designated as where some of our most severe erosion is occurring.

When I talked about this concentration, this 11 percent in Iowa and 5 percent in Tennessee and other States, it would be in this red area, land that as been brought into production probably in the last 7 or 8 years and has really kicked the erosion rate up.

If you go over to the far end of this chart, you will see the potential cropland, land that is currently in pasture range and forest. I would probably say, Mr. Chairman, when the new data come out this summer from the Soil Conservation Service, the national resource inventory is completed now, we will see that some of this land has already come in. In other words, this land that is currently in pasture range and forest.

Senator Armstrong's concern is, of course, that a lot of the land that has been coming into production is this land that is in the 30-, 40-, 50-ton per acre erosion rate losses. And his legislation, of course, deals with that kind of land in order to discourage it from coming into production.

So when you look at both of these together, both these charts, looking at potential cropland and looking at what we currently have in cropland, you can see that, of course, as more land moves into production, we run the risk of making this area much larger and bringing more highly erosive land into production.

Now I would like to move back. Of course, this area here [indicating], is really some of our best land, but it has some erosion problems. There's no question about it. And this is where we should be targeting our ACP and our technical assistance, to this kind of land. It needs contours, strip cropping. It needs terraces. It needs no-till. It needs a lot of other conservation practices that will reduce the rate of erosion here.

But we should not be putting money into some of this highly erosive land where we're really not getting the cost effective returns that we should be receiving. And, of course, this represents our prime agricultural land, our flattest land [indicating]. And one of the things that we found in looking at a lot of the soil conservation work that has been done in the past, unfortunately, a great deal of practices have gone on some of this better land. Now that's not to say that we shouldn't be taking good care of that land. But a lot of it has gone on to the detriment of some of this land that really needs the help right now.

So I think that that is a very important part of this whole problem. And as we've looked at it over the last year, it's become evident to us that the only way that we are going to deal effectively with the soil conservation problem is to move the commodity programs—in other words, to merge the policies and the programs, the part of the commodity programs--into soil conservation.

What we're proposing——

Senator **Jepsen**. Excuse me, Mr. Gray.

Mr. **Gray**. Yes, sir.

Senator **Jepsen**. I sure agree with your last statement. Before we get too far away from these charts, did I understand you correctly that the land that is illustrated in red on that chart is land that is so fragile and so bad to begin with, that we should not put any money into that?

Mr. **Gray**. I would say that the cost effective return, Mr. Chairman, that that land that is in production, a lot of that is so fragile, that we're recommending that it be taken out of production.

Senator **Jepsen**. All right. That was the thing that was missing, or at least I didn't hear it. In other words, you're not saying that we shouldn't target some severe erosion lands as we're doing and so on. But there are some lands that are even beyond that.

Mr. **Gray**. Yes, sir.

Senator **Jepsen**. Should never be in production in the first place and should be taken out.

Mr. **Gray**. That's right.

Senator **Jepsen**. The terminology would be "rather than pouring money down the drain" or something like that?

Mr. **Gray**. That's correct. In other words, that land that is in red, that's currently in production, some of that is so highly erosive and that the productivity losses on that land are going to be so large, that it is really just not cost effective to work on that.

The area of land in the yellow, some of our better land that has some severe erosion problems, that where we would be getting the most effective returns of our targeting money right now.

Senator **Jepsen**. Let me explore this a little bit for a second. Would you go so far as to say to an individual landowner who is farming—land that shouldn't be put under the plow, land that is hilly or land that is in woods, or pastureland, but he went ahead and did it anyway—would you tell him that farm programs were not available to him? Something parallel to the sodbuster bill?

Mr. **Gray**. I think that's really what we're going to have to do. We found in talking to 700 farmers that there was very strong support for cross-compliance among all of the counties in which we asked this question in our survey.

But what we would like to do—I think the only solution to this problem that we are in right now where we have this acreage in production that has already been brought in. Senator Armstrong would like to keep additional acreage like that from coming in and we certainly agree. That legislation should be enacted tomorrow if we could get in in place.

We have a little problem, as you know, with the definition in that legislation of highly erosive lands because we think that it is going to miss a fair amount of acreage that is close to that red category in the potential side that sould be discouraged from being brought into production. But the point is that we have a great amount of acreage here that's already been brought in.

What we are really proposing here is that this year, in the upcoming 1984 set-aside program, if PIK is continued, that a soil conservation reserve program be set up as part of that. We are calling that, the acronym for that is SCRP. But we're not saying that that land maybe should be scrapped forever. But some of it certainly should go back into grass and trees and remain in that forever, if it's possible.

But what we are proposing is really a bidding process being incorporated into the current PIK program for 1984 that would allow farmers to take that highly erosive land out for at least a 7- to 10-year period. In other words, they would have that option for doing that. And that land would then be retired and the farmer would receive the payment from the Government, either payment-in-kind or if it's part of the regular cash set-aside program, then he would receive that.

But if we could remove that area in red that's already in production, we would decrease our erosion in this country by 43 percent, Mr. Chairman. That would be almost a reduction of close to half of the erosion rate if we could get that kind of fragile land out.

So there probably are two approaches here. One, I think we're really going to have to go something similar to the soil conservation reserve program where we offer him that option of taking that land out. And I think the reason why the opportunity is there to do it right now, of course, is the economic situation. I think more farmers would be interested in setting aside some of this land for a 7- to 10-year period. If we had an emergency during that timeframe in which we had droughts or some other problems, a series of crop failures, there could always be a release mechanism to bring some of that land in. I'm not saying that all of it should go out forever, but a great majority of that land is really a major part of our problem.

And, of course, if we then can focus our cost-sharing and technical assistance efforts on that land in the yellow, then we're going to accomplish a lot more. We're getting the land that is most highly erosive, the most fragile land out. Senator Armstrong's bill would keep that other land that's out there that could be plowed up from coming in. And I think those two twin objectives would really reduce erosion in a substantial fashion in the relatively short period of time.

Now we have a whole series of additional recommendations that we are going to make as part of our report. But I thought that this particular recommendation was the most important. And if the argument is made by the Department of Agriculture that it's too difficult for them to incorporate a soil conservation reserve program as part of a second year PIK or set-aside program, then we would propose that they could institute a pilot program right away as part of that.

In other words, to gage how well this idea, this soil conservation reserve program, would work. And what I am talking about is not a pilot program of 2 or 3 counties, but one that would probably involve 140 to 150 counties across the country. And that could immediately be incorporated as part of a second year set-aside program that I am sure probably the Department is going to be coming up with. In other words, if the argument was that it was too difficult to go national with this right now and do it entirely, then we could start a pilot program and in 1 year, we would have a very good idea how well this is working.

We believe that it is going to work very well. We would like to see the entire program started right away. In other words, if we could get just 12½ million acres of some of that most highly erosive land that has been brought in out, we would reduce sheet and rill erosion by almost a third, just to get that much acreage out of production.

So I think that this particular program is an important one. I could have dwelled on a number of other recommendations, but I thought that this one was so important and that this committee was looking for a solution that we would bring this one up this morning and discuss it with you. Our figures show that this program would reduce erosion by a five times greater amount than the current program that the administration is offering.

We appreciated the opportunity to testify and we would be glad to work with you and the members of the committee in instituting and implementing our recommendations.

Thank you.

[The prepared statement of Mr. Gray follows:]

PREPARED STATEMENT OF ROBERT J. GRAY

Mr. Chairman and Members of the Committee, I appreciate the opportunity to appear before you and discuss soil conservation policy and its relationship to the economic situation our farmers are facing today.

The American Farmland Trust is a private, nonprofit organization dedicated to seeking solutions to conserving our soil, protecting our nation's agricultural land base and promoting farming opportunities. In response to requests from public officials, farm organizations, farmers, ranchers and citizens' groups, AFT helps to formulate public policies that encourage farmland conservation; to enable farmers to earn a respectable return on the equity in their property without liquidating it. AFT devises innovative conservation alternatives on a case-by-case basis. And to increase public awareness of both the importance of conserving our agricultural land resources, and the "middleground" approaches that are available to achieve this goal, AFT conducts research, sponsors conferences and publishes educational material.

The basis for AFT's support in these various endeavors are the 25,000 individuals, representing every state in the nation, who belong to our organization. We are proud of what we have accomplished in the relatively short time AFT has been in existence.

This hearing is particularly timely from the standpoint of the American Farmland Trust since we have just completed an in-depth analysis of federal and state soil conservation programs. As part of this two-year project, we interviewed 700 farmers in six major farm states to determine what they are doing -- and thinking -- about soil conservation. I am pleased this morning to have an opportunity to share with this important committee a number of the major findings and recommendations contained in AFT's forthcoming report on soil conservation problems and policy options.

The detailed analytic work we have just completed, clearly shows, in our view, that erosion could be substantially reduced over a relatively short period of time if a number of our key recommendations were implemented. Moreover, a fifty percent or more reduction in the gross tonnage of erosion is possible with little or no increases in expenditures for conservation programs.

However, Mr. Chairman, before I summarize AFT's recommendations for your Committee, I would like to elaborate briefly on the setting in which I am framing my remarks.

As you, Mr. Chairman and other members of this Committee, are well aware, there is a great deal of interest and concern about soil erosion problems throughout the country. Major stories have appeared in the last few years in all major newspapers and on national television networks. Most of our farm magazines have carried articles on soil erosion. A lot of this publicity has been pessimistic in tone. Natural resource management problems in agriculture are indeed serious. Still, AFT is optimistic that it is now becoming possible for U.S. agricultural programs and policies to keep our agricultural sector productive and profitable while at the same time controlling to generally acceptable levels per acre rates of soil erosion. This is the goal we at AFT have been working toward, and we urge this Committee to seriously consider new policy directions outlined in AFT's soil conservation report.

Just two years ago, it would not have been possible to offer such an optimistic prognosis. Much has changed in U.S. agriculture and within USDA in the past two years. There is much more information now on the nature of conservation needs and opportunities around the country, and a rapidly evolving appreciation of how federal farm policies can be modified to more effectively and forthrightly control excessive soil erosion losses. One of the key milestones in upgrading federal capabilities to address the erosion problem is the completion of the initial phase of the Resources Conservation Act (RCA) process. We have now seen and evaluated the Administration's RCA proposals. In our view, the final program proposed by Secretary Block is deficient in a number of respects.

In fairness to those involved with RCA at the federal level, the RCA process did effectively reveal the limitations of the USDA bureaucracy to in fact accomplish what Congress had in mind in passing the RCA. The conservation agencies in the Department have struggled -- with mixed success -- with some very painful issues. The issues are painful because they preclude some very difficult political decisions.

Overall, we have seen some progress. At every level, from the general public to the conservation profession, there is a much more sophisticated grasp of our soil conservation problems than there was in 1977. This improved understanding has opened the door to more innovative policy ideas. The farm community and the general public are receptive. We have come a long way in the past few years. RCA had much to do with that.

Unquestionably the most important contribution made by the law was the appraisal process it mandated: the collection and analysis of a vast amount of data on resource conservation conditions and trends. This information represents nothing less than a revolution in our understanding of the erosion problem. Consider the fact that we did not have reliable estimates of soil erosion rates until the National Resources Inventory (NRI) in 1977. By the end of the summer we will have the results of a second national inventory conducted last year. It will further refine our knowledge of where erosion is occurring and at what rate.

Also, in early 1981, the Agricultural Stabilization and Conservation Service (ASCS) released the first evaluation of the Agricultural Conservation Program (ACP) in the program's 45 years of existence. The evaluation told us a great deal about the entire voluntary framework of conservation and its effectiveness at every level of government. It indicated which practices were most cost effective, and it opened important opportunities to improve both cost-sharing and technical assistance. That evaluation has continued, and has formed the basis for a comprehensive evaluation of the major USDA conservation programs, including the technical assistance activities of the Soil Conservation Service (SCS). We'll have the first results of that effort in hand by this time next year.

This very basic information presents exciting opportunities, as well as fundamental challenges, to the conservation interest groups and agencies who have had primary responsibility for conservation programs since 1934. But without it, we would be hopelessly restricted in the types of policies we might consider.

In addition, as you know, Mr. Chairman, until recently very little research had been done since the 1950s on the relationship between soil loss and crop productivity. Within the next six months, we will see the results of several important research programs which have been investigating that relationship. This research will go a long way toward helping us identify where soil erosion is hurting farmers and society the most. Naturally, that will allow us to spend scarce tax dollars much more efficiently to protect the land.

Another reason why the time is ripe for improving conservation policy is the disastrous state of our farm economy -- and the main reason why this committee is holding this series of hearings on current and future farm policy.

At this particular time, when over 30 million acres are idled because of depressed markets and excessively high stocks, it seems entirely appropriate to integrate a systematic and strategic soil conservation element into the commodity programs. Such a union of goals could substantially reduce erosion and, at the same time, boost farm income by bringing about a complimentary relationship between commodity price support and conservation goals.

The last two years have clearly taken their toll on our nation's farmers. Thousands of farmers have gone out of business and many others are teetering on the edge of bankruptcy. The basic policy of relying almost entirely on the private market to control supply and demand of major agricultural commodities is a shortsighted one that has led to the critical financial situation in production agriculture. We cannot and should not go down that road again. If there is one thing we have learned from this experience, it is that there clearly will be a periodic need for commodity programs in the future to adjust supplies and keep them in line with demand.

The 1983 Payment In Kind program is now history. The price tag for this year is a staggering 12 billion dollars. Although there is no question that the farm economy needed a strong infusion of financial support to bolster depressed prices, it is hard to defend this cycle of blind reliance on the private market followed by a sudden major market intervention of a magnitude never before experienced. The lessons of history are clear and any Administration that ignores these facts of life in agriculture exposes rural America, indeed the country as a whole, to totally unnecessary and senseless risks.

The challenge to agricultural policy makers is to devise programs that will protect farmers during periods of low prices and at the same time assure an adequate supply of affordable food to consumers when supplies are tight. In the future, we must anticipate recurring extremes of supply and demand. Whenever major price swings appear necessary to balance supply and demand, more carefully developed policies should be adopted which are fair to the farmer, fair to the consumer, and acceptable to the taxpaying public.

I do not want to dwell too long in rehashing the failure of past policies. It is easy to criticize in retrospect, and much more difficult to come up with positive alternatives that are workable and, at the same time, able to accomplish the twin objectives of keeping supplies in line and conserving soil.

Therefore, I would like to go back to my earlier point which suggested that we now have an opportunity to work toward both of these objectives. This opportunity may not avail itself again for another few years, which is why we should take advantage of it now.

There are two key reasons why it is extremely important that the commodity programs need to play a major role in combatting soil erosion.

First, severe erosion problems are highly concentrated. One of the most important findings of the 1977 Natural Resources Inventory was that a small proportion of the nation's agricultural land accounts for a very large proportion of the total erosion. Sheet and rill erosion constitutes about 60% of the 6.4 billion tons of erosion reported by SCS in 1977. If we consider all agricultural land uses -- cropland, pastureland, forest and range land, the data show that 60% of the area suffered erosion rates of less than one ton per acre. By contrast, on some land, the sheet and rill erosion rates are extremely high. Nearly 20% of the total sheet and rill erosion in 1977 -- 772 million tons of soil -- was recorded as occurring on just six-tenths of one percent of the land area. On this land, erosion rates averaged 60 tons per year, which is approaching one inch of soil loss every two years.

The most erodible 5% of the land base -- that which was eroding in excess of 11 tons per acre annually in 1977 -- accounted for 50% of the total sheet and rill erosion, according to SCS. If, by adequate conservation treatment, the erosion on this 5% of the land could be reduced to an average of five tons per acre, sheet and rill erosion in the U.S. would be reduced by 43%.

Our central concern is, of course, erosion on cropland. Here again, erosion is highly concentrated. Just 25 million acres -- 6% of the cropland -- accounted for 43% of the cropland sheet and rill erosion. As a rule of thumb, land seeded to permanent pasture or hay, or planted in trees, will erode at less than two tons per acre yearly. If we could find a way to treat these 25 million acres in this manner, we could reduce cropland sheet and rill erosion from 1.9 billion tons to 1.1 billion tons.

Our analysis has shown that erosion is concentrated in every state. On one of the charts we've brought along, we've listed the concentration of erosion in a number of states.

In Iowa, looking at all land uses, Mr. Chairman, about 11% of the land accounted for over half of Iowa's sheet and rill erosion, according to SCS data. Erosion rates on that land averaged 42 tons per acre each year, or about 10 times the national average. That amounts to almost an inch of soil loss every three years.

You'll note varying degrees of concentration in the other states in this chart. But the overall pattern holds true, even where wind erosion is the main problem.

In fact, erosion is concentrated within every land use category. Within every county. Within certain fields on every farm, and within certain portions of those fields. To a surprising degree, erosion is even concentrated within each of the land capability classes.

I would also like to direct your attention to the second chart we have brought along with us today. It indicates the degree to which sheet and rill erosion was concentrated on cropland cultivated in 1977. That is the area on the left side of the chart.

On the right side we show the sheet and rill erosion conditions which would have resulted if noncultivated cropland and other land with "high" or "medium" potential for use as cropland were farmed according to "average" 1977 farming conditions.

The three different colors denote three categories of erosion problems.

Looking at these charts, it is clear we need to design our policies to reflect the differing conservation needs of these three categories of land.

Those needs are very modest for erosion control for the green category. Thankfully, that category is quite large. Sheet and rill erosion on this land is less than two tons per acre per year. That is less than the minimum soil loss tolerance for cropland. Except where topsoil is exceedingly thin, this level of erosion poses little hazard to the productivity of the land, though in some cases it may adversely affect water quality or water impoundments, by causing run-off of pollutants or sediment.

But, in general, this is prime land that can withstand continuous, intensive use, and which should be protected whenever possible from abuse or conversion to nonagricultural uses. It's the land we want to keep in production all the time.

While soil conservation measures should not be discouraged on this land, there is very little justification for government programs to provide technical or financial conservation assistance there. This has been done in the past to spread the assistance benefits as broadly as possible. Where conservation practices pay for themselves as a result of enhanced crop yields or lower production costs, as is the case with terraces in the Great Plains, government involvement is of course effective and popular. But there should be no pretense that soil conservation is a primary or even a significant benefit.

We would note that about half of the cropland is in this category, Mr. Chairman. About 72% of all nonurban land inventoried by SCS in 1977 was in this category, as well.

Incidentally, for wind erosion, 61% of the cropland and 91% of the rangeland eroded at rates of less than two tons per acre in the ten Great Plains states where wind erosion was estimated in 1977.

The second category is yellow because this land must be used with caution for the production of cultivated crops.

The second category is more difficult to define and quantify. Generally, it is land which, under normal farming conditions, and without traditional conservation practices or conservation tillage methods, would suffer erosion rates damaging to soil productivity or water quality. For the sake of argument, we will assume that this category is comprised of all land eroding the range of three to 14 tons per acre annually. Even if this land is used intensively, erosion usually could be reduced to the conventional T value, if not below it, with some form of conservation tillage, and certainly with no-till.

As you can see, a sizable portion of America's cropland is eroding within this range, and existing conservation policies and programs, if modified to increase their effectiveness, can do much to solve the problem.

The final category consists of land eroding in excess of 15 tons per acre. Some analysts prefer a higher erosion rate for defining this category, and we explain in our final report several refinements in where the line should be drawn. But the idea behind this category will remain unchanged: it is land which requires expensive combinations of conservation practices if erosion is to be reduced to acceptable levels.

Of course, with no-till farming practices, much of this land could be brought into the second or even conceivably the first category. As these tillage practices become more common -- and they're becoming more common everyday -- we hope more of these highly erodible acres will be treated than was the case in 1977. But we feel we cannot rely on the extension of tillage and conventional practices to control erosion on this land. This land is most efficiently and effectively conserved by putting it in a productive use other than erosion-inducing cultivated crops.

We have applied the same criteria to the noncultivated and potential cropland shown on the right side of the chart. If we had our wish, it would be that the best of this potential cropland would be brought into crop production first. Much of that land can be cultivated with little risk, particularly if conservation tillage is used. And as we have seen, these first two categories represent the type of land on which most of the conservation tillage is in fact being found. But the red category of potential cropland is going to cause trouble. We won't know how much of each potential cropland category has been brought into production since 1977 until the 1982 NRI is released. That is why we strongly support Senator Armstrong's "sodbuster" bill as a means of discouraging this highly erosive (red category) potential cropland from coming into production.

The second major concern is the effectiveness of the long-standing cost-sharing and technical assistance program.

We have noted a disturbing gap in the way our conservation programs have worked. Most of the land with a great potential for erosion has essentially no conservation treatment of any kind; not traditional measures like terraces and contouring; not even profit-enhancing measures like conservation tillage. That was the finding of the 1977 NRI, and it has been a consistent finding of the excellent evaluation of the ACP program which I mentioned earlier.

We will not go into great detail on the types of practices and amount and type of acreage protected by them as observed by SCS in 1977. But here are a few -- rather disturbing -- findings:

Very few cropland acres were treated with "traditional" conservation practices -- terraces, contour farming, etcetera -- in 1977.

Only 9% of the nation's cropland was terraced in 1977, and on most of that land erosion was not a severe problem before the practice was installed. About 71% of the acreage where terraces were the primary conservation practice is in the Great Plains. The terraces are built there primarily for water conservation purposes. By contrast, Iowa, the "leading" state for sheet and rill erosion, ranks seventh in terraced acreage.

Less than 5% of the nation's cropland was protected by contour farming in 1977.

Approximately 63% of the land treated with minimum tillage as the primary conservation measure in the Corn Belt in 1977 had a modest potential for sheet and rill erosion before the practice was adopted.

In summary, conservation measures of all types tended to be concentrated on land with fairly modest erosion hazards, while the land with very high potential for erosion remained largely untreated, at least as of 1977. Yet this highly erodible land accounts for the majority of the country's erosion.

Therefore, it is important to target both technical assistance to that cropland that is most in need of conservation practices and where cost effective results can be obtained.

As part of the series of questions AFT asked in our farmer interviews, we asked the reason they adopted or used a certain conservation practice. The vast majority -- 70% -- responded that the major reason for using a particular practice was the clear expectation that it would lead to lower operating costs. This contrasted sharply with the expectation of receiving cost-sharing funds and technical assistance from the federal government. Only an average of 21% gave this as the primary reason for making the decision to put a certain conservation practice in place.

There is much more information contained in these interviews which we think will be very useful to you and members of your committee. We will be releasing this information soon, along with a series of recommendations.

Before I conclude my remarks this morning, I would like to put forward a major recommendation that, if implemented, would result in a substantial reduction in erosion in a relatively short time period.

Here is how it would work. Basically, it would be a long-term Soil Conservation Reserve, in which farmers would be offered contracts to put highly erosive land into grass or trees. Here is how the program would work for cropland in production as of 1984.

As is now the case, all farmers with a "base" acreage would be eligible for price supports and deficiency payments for crops they grow. However, those farms or portions of farms in the "red" category (however it is ultimately defined) would be selectively sought for voluntary participation in the Soil Conservation Reserve Program (SCRP). Owners or operators of this land would be offered an opportunity to submit a bid for a contractual payment -- perhaps a payment-in-kind -- to retire land from crop production for a period of seven to ten years. There would be a release mechanism, pegged to commodity prices as is the grain reserve, by which the Secretary could release all or a portion of the land from the contract in periods of escalating prices. Of course, the farmer could break the contract anytime he chooses, but he would have to repay any payments received that year, and other penalties may have to be devised to prevent abuses of the reserve.

The programs would be most active under circumstances like those which lead to PIK. The Secretary of Agriculture would establish procedures to retire first the land most seriously affected by erosion. It is unlikely that the magnitude of production adjustment required this year would ever be met by the conservation reserve alone. Set-asides of one year would also be needed from time to time. But when possible the more erodible lands should also be selectively sought for set-aside programs.

We believe this program could be implemented as part of the regular set-aside programs.

It is also our belief and our recommendation that this process be started immediately as a pilot project incorporated into the 1984 cropland set-aside program. This would give USDA the ability to establish the criteria for determining the type of land eligible for a long-term soil conservation reserve and at the same time assess manpower needs and the effectiveness of this kind of approach. A large enough sample of counties would have to be included in a pilot project in order to produce statistically significant results. Our research shows that a Soil Conservation Reserve Program implemented now and continued through the next few years could result in reducing sheet and rill erosion on cropland by as much as one-third. This is five times the soil erosion reduction as would be achieved by the USDA's current National Soil Conservation Program. And, as mentioned earlier, this kind of program would help to reduce the surpluses in the major commodity crops, which in turn would enhance farm income.

Mr. Chairman, I know that this committee is looking for answers to a number of difficult farm policy questions. Therefore, I was prepared this morning to offer what AFT believes is a constructive and workable solution to a problem that has been getting steadily worse in the past decade. We believe that it is absolutely imperative that a Soil Conservation Reserve Program be established immediately. As a private organization, we stand ready to offer the necessary assistance needed to implement such a program.

Lastly, Mr. Chairman, I would like to compliment you on your efforts to speed implementation of the Farmland Protection Policy Act. Although the implementation has been delayed for a full year, it is nonetheless heartening to see these guidelines finally issued. They were long overdue.

I would also like to comment briefly on a statement by one of your earlier witnesses, Mr. Emery Castle, President of Resources for the Future. In his statement of May 26, Mr. Castle objected to what he termed "a great deal of time and energy [being spent in] worrying about the conversion of rural land to urban uses -- ." As the former Executive Director of the

National Agricultural Lands Study, I find this kind of statement completely out of tune with events in the real world. Over 20 states, including the state of Iowa, have enacted programs dealing with the problem of farmland conversion and hundreds of counties and municipalities have, as well. Congress strongly supported the Farmland Protection Policy Act in the 1981 Farm Bill. Have all of these people acted improperly and are they wasting their time? I think not. The rate of farmland conversion to nonagricultural uses continues to be a major resource problem in many states throughout the country. State and county governments have recognized this through their own resource inventory data and by using information and data from the Department of Agriculture. We should be supporting these efforts rather than pooh-poohing them.

As a matter of fact, if the conversion trends we uncovered as part of the analysis by NALS continued to the year 2000, we would lose area of cropland and potential cropland equivalent to almost the current acreage under cultivation in Iowa. Even with the surpluses we face today, I don't think anyone would opt to forego that kind of loss to the cropland resource base, Mr. Castle's comments notwithstanding. As you know, we compiled the conversion information from the same inventory that produced the data on soil erosion.

I appreciated the opportunity to testify before the committee and would be pleased to answer any questions you might have.

CONCENTRATION OF SOIL EROSION IN
SELECTED STATES IN 1977 FOR
MOST ERODIBLE AGRICULTURAL LANDS[1]

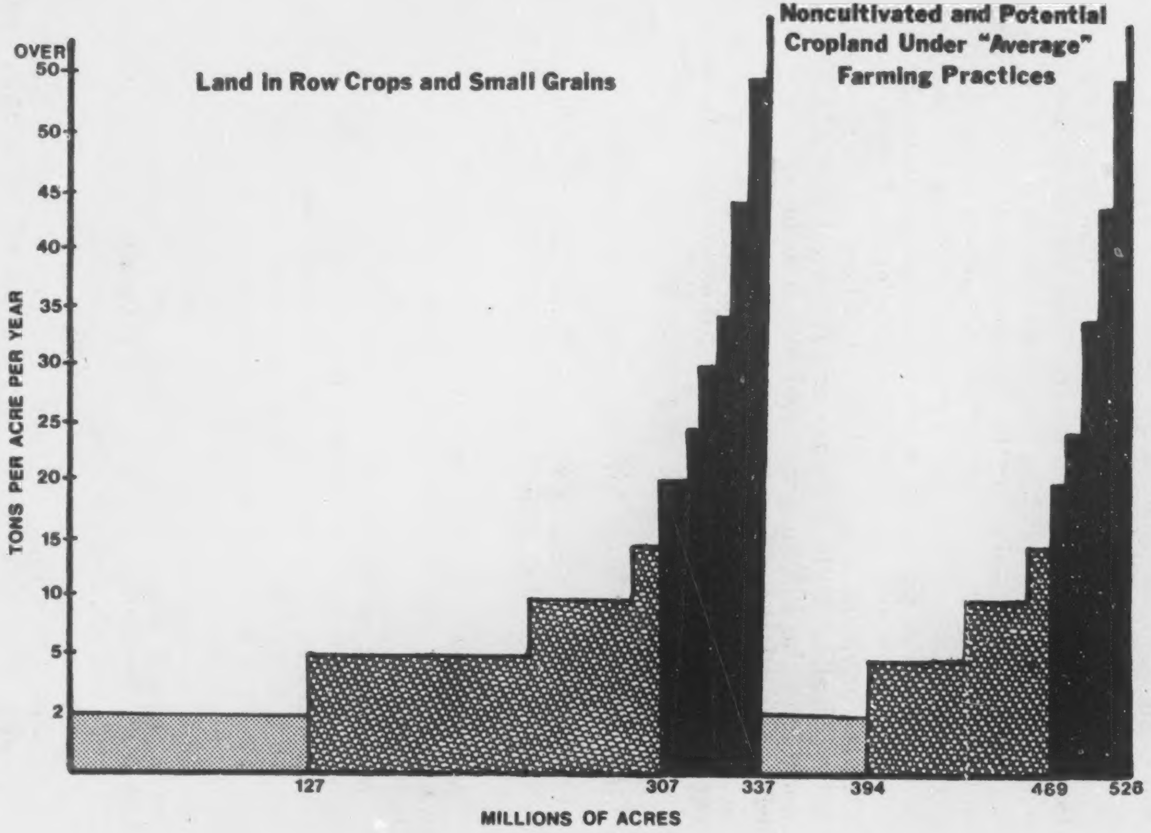
STATE	MILLIONS OF ACRES	PERCENT OF STATE TOTAL	MILLIONS OF TONS	PERCENT OF STATE TOTAL	AVERAGE RATE TONS/ACRE/YR
ILLINOIS	1.7	6	76	41	45
IOWA	3.5	11	148	53	42
KANSAS*	6.2	13	137	53	22
MISSOURI	3.1	8	131	53	42
NEW MEXICO*	5.0	10	234	60	12
OKLAHOMA*	2.6	6	55	42	21
OREGON*	1.4	5	10	26	7
SOUTH CAROLINA	0.6	4	8	45	15
SOUTH DAKOTA*	2.3	6	49	39	21
TENNESSEE	1.2	5	55	55	48
TEXAS*	15.1	10	794	68	53
VERMONT	0.3	5	3	56	9
WASHINGTON	1.1	4	25	44	24
WISCONSIN	0.8	3	25	39	31

[1] Includes cropland, pastureland, rangeland, and forestland

*Includes wind erosion

Source: Soil Conservation Service/USDA, 1977 National Resource Inventory

CROPLAND SHEET AND RILL EROSION 1977



Senator **Jepsen**. I thank you, Mr. Gray. Congresswoman Holt will chair the hearing for a few minutes. I have been called out on an emergency. I will be back shortly.

Representative **Holt** [presiding]. Mr. Chairman, I was just going to say that I expect a vote on the floor of the House any minute, but I can chair the meeting for a few minutes.

I am deeply grateful for the testimony this morning. It's so very timely in my particular instance. In Maryland, the Environmental Protection Agency has just completed a study of the Chesapeake Bay. The major pollutant in the bay turns out to be the agricultural runoff, the erosion that has taken place. I walked in without knowing anything about agriculture. I have never served on a committee dealing with it and immediately, I thought, why in the world isn't the PIK program tied into soil conservation? Why can't EPA and all these other agencies get together and handle this thing? But, instead, we're really dealing with all of them in a vacuum. I think it's very, very good that you brought this information to us today. I certainly appreciate it.

Mr. **Gray**. Thank you.

Representative **Holt**. Mr. Sampson, please proceed.

STATEMENT OF NEIL SAMPSON, EXECUTIVE VICE PRESIDENT, NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS, WASHINGTON, D.C.

Mr. **Sampson**. I have submitted a prepared statement and I would like to just briefly, in the interest of time, cover some of the highlights.

In keeping with the other testimony that the committee has heard this morning, we believe that soil conservation policy has to be an integral part of farm policy. There's just no way that we can set up a farm policy and then come back later and try to use the conservation program as some sort of an add on.

It's pertinent that the Joint Economic Committee is studying this question, because soil conservation and the soil erosion problem have distinct economic implications on American agriculture. But those implications have been very difficult for us to pin down and quantify and analyze very well.

I've gone through two little graphs near the front of my perpared statement which indicates some rather new research information. Basically, what those little curved lines tell us is that as topsoils get shallower, all else being equal, every inch you remove cuts into your productivity more, cuts your yields more. This means not only is there a problem with how much topsoil we lose, but there's also a problem about what topsoil it's coming from. The soils that are there tell much about what kind of productivity losses we're suffering.

That has some very distinct implications for national policy on investment, too, because the same research tells us that new technology development such as new crop varieties or fertilizers or new management techniques pay back more on good lands than they do on poor lands. Every dollar we invest for research today in agricultural productivity and agricultural efficiency is going to return a bigger dollar benefit on our better lands than it is on our poorer lands.

The second graph, in my prepared statement tells us that soil conservation and research policy have to be linked together. If we were to carry out two or three decades of research and reap the results of that as we expect we would be able to, and if we hold topsoils where they are today, then we get the full benefits of that research. If, however, we let the topsoil decline during those same two or three decades, we get a more limited return from that research investment and it's possible, if you let topsoils decline far enough, you actually end up getting less crop yield in spite of the research program. You are building new technology, but you are losing ground, nonetheless.

Representative HOLT. I hope you'll forgive me. I do have a rollcall vote, Mr. Tosterud will take over here. Senator Jepsen will be back shortly. Thank you very much.

Mr. SAMPSON. I think the next point that I would like to make is the change that we went through in the 1970's. Several people have mentioned that the Soil and Water Resources Conservation Act spent considerable time looking at the conservation program. Of course, what we know is that they found some problems.

I think one of the primary reasons they found problems is that in the early to mid-1970's. American agriculture went through such dramatic weather fluctuations and incredible economic swings. At the same time, we developed a whole new approach to commercial production, where we've got intense, specialized production in which 2 acres out of every 5 goes abroad. As a result, we ended up with a conservation technology that was as out of date as a 15-horsepower tractor. The inventory data gathered in 1977, to no one's terrific surprise, discovered that.

What has happened since then, though, has been that we have had 5 to 6 years to develop new conservation technology to catch up to where agricultural technology moved. We are in the middle of a joint effort with agribusiness, USDA, and the conservation districts in a new conservation tillage information center. We just completed a national survey on conservation tillage practices. It is interesting to see what is happening with some of the new technology—no till, ridge till, and some of the other things that farmers call it, where they are leaving crop residue on the surface of the land and cutting soil erosion and water loss very significantly.

But there's a tremendous way to go with this technology. In Maryland, 28 percent of the corn and 45 percent of the soybeans are now being farmed under no-til conditions. In Iowa, those same two figures are 1 percent for the corn and less than 1 percent for the beans. That tells us that in the Midwest, there is a tremendous potential for this technology to expand. It's just at the very starting spot.

But the fact that we are gaining good acceptance of conservation tillage shouldn't detract us from the conservation program, and that's one of the hazards that we face. Conservation programs in this country have a problem in that they are subject to the hazards of being victimized by their own success. The very best soil and water conservation program that we could have as a Nation would be one that would help farmers find a way, in light of the weather they face and the technology that they are using and the economic situations that they face, to prevent soil and water waste.

Well, if you prevent those things, you have no problem. And if you've got no problem, why should you have a program? Soil and water conservation, as a prevention program, rather than a construction program, faces some interesting analytic dilemmas. A damage prevented is a damage that never occurred. If you try to put a price tag to it, you're trying to put a price tag to a fictitious event.

So despite the fact that study after study shows us that investment in damage prevention is much more cost-effective than letting the damage occur and then spending the money to fix it, we still have a very difficult time in national policy debates when we talk about priorities for damage prevention programs. They always come out in the analytic process looking like second-rate efforts.

Let me talk just a minute about the future.

The future for agriculture in America, it seems to me, looks like a future of volatile and very difficult to forecast conditions. About 10 years ago I worked with a scientific panel that determined that the corn crop in this country had gone above and below an average trend line by about 12½ to 13 percent on the basis of weather alone. And the climatologists at that time told us that while they couldn't predict weather, they could certainly predict variability. They said we were entering into a period of more variable weather conditions than we had seen in the past. I think they were right on that one. The last 10 years has demonstrated that.

Ten years has also demonstrated that you can't plan farm policy. In the fall of 1980, the incoming Block administration heard forecasts that the United States was carrying low carryover stocks into a year where weather looked very unpredictable, so the chances for strong markets, good prices, and reasonably short supplies were good. An administration that wanted to keep the Government out of farm policy and farm set-aside programs as well as to promote exports was overjoyed with that news. Today, Secretary Block presides over the largest set-aside we have ever tried to attempt in this country, accompanied by a significant decrease in exports, both outcomes he did not wish to see happen. Weather and world economic situations that were completely beyond his control—and our national control—did the trick to us.

I think that's likely to continue in the future. There's no sign that it won't. As agriculture is tied more and more to foreign sales is, by its nature, more volatile because it is subject to international weather, economic, and political situations beyond our control.

That suggests that American agriculture has to have a permanent farm policy. This get-in and get-out routine is very, very difficult for farmers to manage, and the land ends up getting damaged in the process.

We need a long-term, stable, rational approach to farm policy that includes the ability for farmers to calculate their crop acres for those crops that are periodically in surplus on the basis of the total rotation that they need to grow.

One of our problems in conservation has been that we have been very eager to get out of the farm programs. We jump out the minute that the market will let us. Then everybody plants every acre that they can to wheat or corn or cotton or rice, because they know that if they establish a large base in that crop, when the next set-aside program comes back, they will be cut back less and, therefore, be able to survive that tough economic period in better shape.

The conservation farmer, who wants to plant grass or use a crop rotation that builds up the soil, knows that if he does, and gets caught in the history-taking process, he is going to lose seriously as a result.

Consequently, this has pushed farmers to plant every acre every year to the most important cash crop that they can grow on their land. It both hastens the return of surpluses and hastens the damage to the land. It cuts us both ways.

In order to stop that, we're going to have to get in and stay in with a Federal farm program. We don't have to have a set-aside program every year, but we have to have an acreage recording program every year so that farmers can set up a consistent rotation and not get penalized for it. I've gone into more detail on that in the prepared statement.

If you believe that we do go in and out of weather and economic cycles, and that we will move from surplus to worse surplus to less surplus to no surplus, then you have got to talk about a countercyclical policy that helps to dampen the impacts of those cycles.

We think that conservation and production policy can be linked in two ways. At the downside of the cycle, when income support programs are in, income support ought to be tied to conservation performance with some sort of a cross-compliance provision. Also, we favor a green ticket approach, which is an added bonus—for people who are willing to put a whole system on the land and keep it there.

During periods of strong markets and no income support programs, we favor the use of tax incentives, both investment tax credits for long-term investments in land improvements, and again, a green ticket tax credit for having a locally approved conservation system in place on all the land.

This way, you catch both sides of the cycle. You attempt to support conservation performance during the income support or low side and you attempt to encourage private investment during the high side. I, would help to dampen the swing both ways.

We feel that national programs for soil and water conservation ought to do a better job of reaching out to their partners at the State and local level. Governor Olson spoke eloquently to that. I won't add to his remarks, except to say that the history of the soil and water conservation programs at the Federal level have been literally to penalize those States and localities who were willing to fund a part of the joint effort. When the States and localities began to be willing to pick up part of the cost to supplement a particular program. Federal budgetmakers used that as an argument for cutting back the Federal support. That's a terrible signal to be sending from Washington to those people when you're trying to encourage them to help in a cooperative effort.

We think that the State and local governments must have the leadership in any kind of a regulatory approach. We don't think that regulation is an appropriate Federal policy, and it should not be proposed. But that is not to say that regulations have no role.

Today, the 640 residents of Petroleum County, Mont., are considering an antiplow out ordinance because of what is happening there. If they enact that ordinance, it will fit Petroleum County and be what they want and need to fit their problem. We think that is the way it ought to be done.

Finally, we strongly support, as others do, the establishment of the grants program. We think this would help turn those negative incentives around and make it more appealing for States and localities to join in program funding. The Senate has passed that as part of the appropriations bill and as part of the conference. We strongly support its adoption.

At this point, I'd like to stop and if there are any questions that the committee staff would care to ask, we'd be happy to respond. Thank you.

[The prepared statement of Mr. Sampson follows:]

PREPARED STATEMENT OF NEIL SAMPSON

Mr. Chairman. Members of the Committee.

It is a distinct privilege to appear before you today to discuss some of the aspects of the soil and water conservation program and their relationship to the farm policies of the future.

The first point I would like to address is the relationship of soil and water conservation policy to farm policy. It is our contention that any successful soil and water conservation policy must be an integral part of farm policy, not something that is tacked on as an afterthought.

Let us first establish the facts. Of the roughly 1.4 billion acres of non-federal land that makes up the United States, 413 million acres were used as cropland in 1977; another 541 million acres produced forage for livestock; and the most of the remainder was in forest. As important as they are to human use, and as critical as their soil and water problems may be, urban, transportation, industrial and other built-up uses only actually used about 6 percent of our non-federal land. Thus, it is clear that the vast majority of the land in America is directly affected by the Nation's agricultural policies and programs.

Much of the soil damage that is the primary concern of those soil and water conservation policies occurs on the intensively used agricultural lands. The 1977 National Resource Inventories conducted by SCS found over half of the anticipated soil loss in America occuring on cropland; most of the remainder on pasture and range lands. The more intensive the agricultural use, the more likely the land is to suffer soil damage.

To best understand the impacts of soil erosion on American agriculture and farm policy, we must look at some of the new research findings that illustrate the relationship between technology, yields and soil quality. That relationship, which has been shown to hold true for a few crops, needs additional research, but it appears likely that it can be generally stated in the following principles:

1. Yields go down -- all else being equal -- as topsoil depth is reduced, and each inch of topsoil removed will reduce yields more than the preceding inch. In addition, losing one inch of topsoil means that the next inch is likely to be lost at a faster rate, as the shallower topsoil has less water-absorbing capacity and resistance to erosion.

2. Research results -- a new crop variety, fertilizer, or management method -- all else being equal -- will raise yields more on deep topsoils than on shallow ones; more on prime farmlands than on marginal lands.

These two general relationships are shown in graphic form in Figure 1, and what they tell us is fairly important.

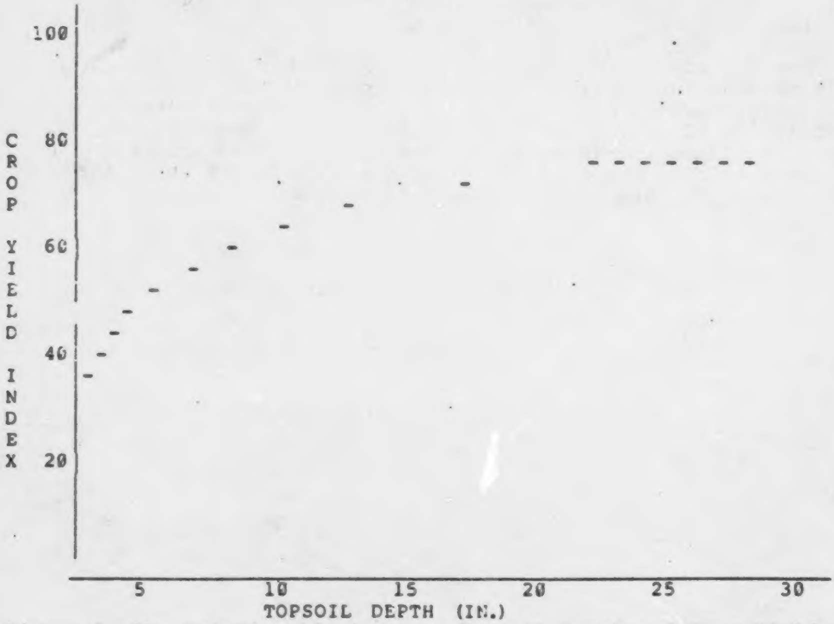


Figure 1. The Relationship between Topsoil Depth and Crop Yield

For those topsoils that suffered erosion this past year, they will -- all else being equal -- lose more next year, and each increment of loss will cut soil productivity more than the same increment last year. It also tells us that as the prime farmlands are lost, to be replaced by the conversion of more marginal soils to crops, the average soil quality, for which topsoil depth is an important indicator, will go down.

At the same time, the research results applied or new technologies or investments made next year will pay back less in terms of added yield per dollar invested than we got for that same dollar a year ago.

In this light, you can't use the past as a reliable indicator of the future. If you do, it will lead to a false sense of complacency that can blind you to an accelerating damage trend that accelerates more in economic terms than the physical measurements would indicate.

In Figure 2, the bottom line (line A) indicates the relationship of crop yields to topsoil quality today, while the top line (B) shows how that relationship might look after a few decades of technological progress in average yields. An investment in agricultural research over a period of years could yield a net profit equal to the vertical difference between the two curves so long as topsoil depth (or the average quality of the crop soils in the area under study) remained the same during the intervening years. This would have the effect of moving us from point "1" to point "2" on Figure 2.

Should the average topsoil depth diminish, however, during the period while the new technology is being developed, the new yield levels will be diminished accordingly. Then we might move from point "1" to point "3", and the net return from the research would be reduced significantly. If enough erosion took place, it is entirely conceivable that you could move from point "1" today to point "4" in the future, and have lower crop yields in spite of the research effort.

The lesson from this graph is that research and technology can not be used as substitutes for soil conservation or farmland protection. They are, instead, vital parts of a combined agricultural policy strategy that need to move forward in balance for investments in either to be fully cost-effective.

The gains recorded by agricultural research and technology in the past will become harder and more expensive to repeat if the average depth of topsoil continues to diminish. The same holds true if the ratio of prime farmlands to marginal croplands continues to diminish. That is an economic trap we need not -- and should not -- let the Nation fall into, for we know how to put good soil and water conservation systems on the land.

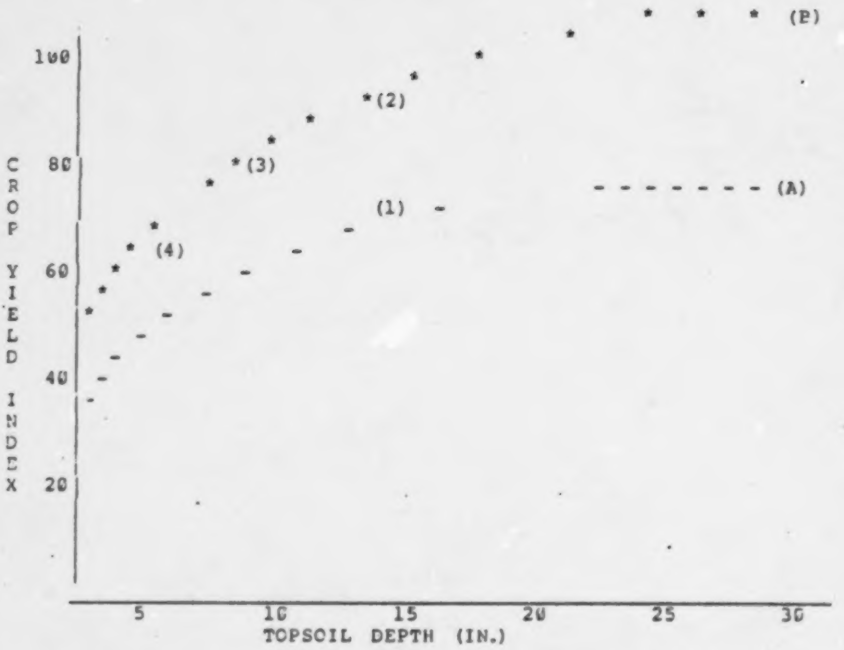


Figure 2. Interaction of technological progress and topsoil-yield relationships.

Source: Generalized from David J. Walker and Douglas L. Young, "Soil Conservation and Agricultural Productivity: Does Erosion Pay?" Paper presented at WAEA, Lincoln, NE, July 19-21, 1981.

A good soil and water conservation system on any piece of land simply means good maintenance, repair and upkeep that allows the land to be utilized for economic production without the destruction of the basic soil and water resource base. Under good conservation management, soil and water are renewable resources. Without such management, they are non-renewable, like oil or copper, with the only question being how long they will last until exhaustion makes them worthless for human purposes.

A good soil and water conservation program, in the context we will discuss today, is a publicly-funded program that aids private landowners in the design, establishment, and maintenance of good soil land water management systems on their land. These systems are in the public interest, but the public programs do not dictate to the landowner. We find that generally unacceptable in our society. Public programs also do not protect topsoil. Land users do that task. But public programs can provide much in the way of information, encouragement, and assistance to those land users.

The base element of a good public program is research. We need to know how to manage soil and water for both profit and protection. We can learn some of that by accident or on-farm experience, but that is not enough.

We need education programs and technical assistance programs to spread knowledge from those who have learned it to those who need to know. That process can be from laboratory to experiment station to farm; or it can be from one farm to another.

Finally, we need economic incentives for some of the practices involved in soil conservation. Many times a good farm management system, in terms of on-farm impacts, still produces too many off-site damages. In these situations, farmers need to install protection devices where the benefits derived are largely off the farm while the costs are borne solely on the farm. Where this is true, we believe cost-sharing to allow the public to pay for identifiable public benefits is a rational approach.

We have just been through an intensive 5-year study on the effectiveness of soil and water conservation programs in the United States. The findings were not all that encouraging. As good as our programs are -- and they are the best in the world, by any measure -- we still suffer too much damage. People asked why that was so, and how we could let it happen.

The answer, it seems to us, is fairly simple.

A good conservation program, like any good maintenance program, must be effective in relation to the production system it serves. In agriculture, what that means is that the soil and water conservation programs must help the farmer find a system that is effective for his particular land and crop situation in the face of the weather, the economic circumstances, the agricultural technology, and the legal and social framework at any given time.

In the early to mid-1970's, American agriculture went through dramatic weather fluctuations, incredible economic swings, and developed a whole new approach to production. Intense commercial, specialized production, in which 2 acres out of 5 were grain grown for export, resulted. Old soil and water conservation techniques became as outdated as 15-horsepower tractors. Evidence of serious soil erosion, farmland conversion, and water waste was clearly identified, and the sudden reemergence of those problems came as a shock to many Americans, who had relegated soil erosion to the dust-bin of "solved" problems.

Voices for reform rang out everywhere, particularly in Washington, where distance and political fervor make it fashionable for critics of any government program to blame "those folks out there" -- in this case, farmers, or "inept bureaucrats" -- in this case, the USDA agencies and the conservation districts who have been entrusted with the conservation mission.

Not all of those critics were wrong on all counts. There are few public programs, or private endeavors, for that matter, where examples of shortcomings are totally absent. In general, however, most of the critics missed the mark. What the public soil and water conservation programs needed was not significant reform or abrupt change. What they needed was public support -- including enough public funding to "catch-up" to the new scene imposed by the abrupt changes in the agricultural situation -- and time.

Today, due largely to the steady work done in USDA and the Land Grant Colleges, the unflagging efforts of soil and water conservation districts and the state and local governments that work with them, the support of many farm and environmental organizations, a Congress that respects the value of the land we strive to protect, and a new wave of interest and support from agribusiness, we see much cause for optimism.

We have new conservation tillage techniques that cut soil loss to negligible levels under many soil and crop situations. Those techniques are being adapted and extended to more and more soils each day. They are not the total answer nor even the final answer, but they are one answer, and they fit today's agricultural situation. They fill a significant void that was created when agriculture went intensely commercial and left traditional conservation technology so far behind.

But the existence of these hopeful signs must not be read as a signal that we can relax our conservation efforts. These new techniques need nurture, innovation, adaptation -- and, in addition, they must be supplemented by still newer techniques to meet new challenges. As certainly as conservation technologies must remain relevant to the agricultural situation, we can say that we will never arrive at the "final" soil conservation solution. Either the weather, or the economy, or new technology, or new social pressures will continue to bring change, and soil conservation technologies -- as well as the public conservation programs -- must constantly evolve to remain relevant to the system they must serve.

The Office of Management and Budget regularly attempts to cut the budgets of the soil and water conservation programs -- or proposes they be eliminated entirely -- or suggests that they be paid for by somebody else, either the private sector or the state and local government. Their measurement of maximum cost effectiveness for the federal government favors programs that either do not cost anything in terms of the federal budget, or that build a lot of readily identifiable missiles or monuments that can be counted and given a firm value. Unfortunately, the soil and water conservation programs meet neither criteria, so they generally do not fare well.

If it were not for the Congress, where the testimony of citizens about perceived values may be as important as the testimony of economists on measured dollar values, the national soil and water conservation effort would be far worse off today. That situation, it seems, will remain, for there is little that can be done to change the basic nature of these programs in order to make them more attractive in the eyes of an analyst trained to measure only concrete, identifiable, quantifiable outputs.

Good soil and water conservation programs help people prevent damages to the land and water. But how can an economic value be given to that achievement? Assigning a dollar value to a damage avoided means one must put a price tag on an event that never happened. As a result, in spite of study after study demonstrating that damage prevention is far cheaper than subsequent repair, such programs face difficult hurdles in the public budget-making process.

The most effective soil and water conservation program imaginable would be one in which the farmers of America were given the knowledge, assistance, and incentives to be able to produce profitably without damaging the quality or quantity of the topsoil. Imagine what a field day the budget-cutters, economic analysts, and critics of government would have with a program like that! Funding for an errort where there was "no problem" would not last five minutes before being cút out of the budget as the Nation moved on to "higher priorities."

But now we face a problem even more complex and politically difficult than just maintaining the conservation programs or supporting adequate funding. That question is this: How can we integrate the soil conservation programs into the totality of national farm policy so that, as agriculture changes in the future, the conservation programs will adapt at the same time, and farmers who are involved in farm programs will be encouraged to produce with sound soil and water management as an integral part of their operation?

If we could find ways to accomplish that ambitious goal, the soil and water conservation programs of America, funded at very modest levels in terms of the total budget of either the Nation or USDA, would be adequate to help the Nation assure a long and prosperous agricultural future.

The future of agriculture, for many reasons, looks like a future of volatile, difficult-to-forecast conditions. Weather and climate seem likely to remain more variable than in past decades. As agriculture is tied more and more to foreign sales it becomes, by its very nature, more highly volatile. One of the results is that massive surpluses and/or shortages can build up with amazing speed. Technology will continue rapid advances, and farmers will almost certainly face increasing cost pressures as farm input prices, tied to inevitably shrinking petroleum reserves, continue to rise.

None of these trends predicts a smooth and easy future for farm policy. And none of them appears to lead toward an automatic, market-generated set of incentives favoring good soil and water management on the part of farmers. As a matter of fact, these changes, particularly if they occur erratically and in rather sudden, significant changes in conditions, almost always provide incentives for over-intensification of cropland management and subsequent damage to those soils.

We know that today's low farm prices, high input costs, and the generally depressed farm economy have driven farmers to exploit their land in order to get the cash flow needed to stay in business during tough times.

But that should not be taken to mean that a sudden reversal of economic conditions -- a 1973-style return to short supplies and high prices -- would provide the cure. Under those conditions, farmers are encouraged to take advantage of high prices by expanding crop acres, often planting cash crops on marginal lands or using up nonrenewable water supplies.

Thus farmers are pressed to exploit the land at both the low end of the economic cycle and at the high end, and the whole situation is made worse if the farm economy moves erratically, jumping from high to low and back again so rapidly that there is little, if any, time for relatively stable conditions. We have been in such a situation recently, and there are no signs that this kind of rapid and erratic change will not continue.

It becomes imperative, if that is the case, to have a farm policy that provides counter-cyclical incentives to help dampen the swings caused by weather, world economic conditions, political decisions, and technological change. Nothing can be expected to control those events, so policy must be found that can help dampen their excessive effects on the individual farmer. If we do not, those small private businessmen may be damaged or destroyed by events far beyond their individual control.

Since farm policy is so important in affecting the ways American farmers decide to use their land, it is vital that they have some kind of predictable, stable policy situation in order to make rational, long-term land use decisions. Thus one of the first decisions that must be made is to decide that we really want to have a permanent farm policy -- not one that is turned on and off by changes in weather or international events.

If we can establish the fact that our farm program will remain in effect year in and year out, we can begin to address the situation with regard to establishing base acreage figures for farmers. This is one of the most important ways, in our opinion, that conservation policy could be linked to farm policy.

Our past practice has been to abandon our farm programs as quickly as market conditions allowed. At that point, all acreage restrictions and marketing quotas were dropped. Farmers could grow any crop in any amount. But farmers have always known that the probability of another surplus cycle, accompanied by another acreage restriction, stays high. They also know that, if that occurs, the base acreage of their most vital cash crops will be computed on their history of growing those crops. As a result, farmers feel they must grow as much cash crop as possible -- every year -- in order to assure that they have a high acreage base established when the next acreage cut-back is needed.

NACD's Council, at our most recent Convention, passed several resolutions that speak to this subject. In general, what they all point out is that this practice has discouraged farmers from planting forage crops, grass and legume seed crops, cover crops, or green manure crops as a way of building soil quality and preventing erosion. In addition, sound soil conservation systems built on regular crop rotations have largely been abandoned.

We feel this situation could be greatly helped by a farm policy that calculated each farm's normal crop acres on the basis of the total rotation for that farm. This would give the farmer credit for the grass and legume crops in the rotation, and allow him to designate cropland as "voluntary set aside" even in years when no mandatory set-aside program was in effect. In this way, the farmer could plan a longer-term system on the basis of his own assessment of the land's needs, not be forced to react to a new set of program pressures every few years.

It could work in this manner. A farmer has some steep cropland where normal tillage and rotation practices won't prevent excess soil erosion. The land is being damaged by continuous wheat production and his yields are going down, but he doesn't want to give up all future opportunity to go back to wheat on that soil when markets are right. Under today's situation, he is just about forced to keep growing wheat on that land every year or two, continuing to damage the soil and place wheat on a market that doesn't need it.

Under a long-term policy featuring a voluntary set-aside, he could plant that hillside to grass, and record those acres with ASCS as a voluntary set-aside from his wheat acreage. If, in a year or so, a mandatory wheat set-aside were to be needed, his wheat base would be calculated from the acres grown prior to the voluntary set-aside, and the grass acreage would be eligible to meet part or all of his required set-aside. In other words, he would be rewarded for already having carried out a set-aside, rather than penalized as has been the case so often in the past.

Such a program would require that ASCS keep continuous records on normal crop acres and be available so that farmers could record their voluntary set-asides, even in those years when no government acreage control program is in effect. This would require a permanent farm program, where the annual changes are mainly those that affect whether or not a set-aside is needed, and how large that set-aside must be.

No doubt, our hopes and efforts in such a program would be to limit the use of set-aside programs to those years when they are absolutely needed, letting normal markets and an aggressive sales and promotion program carry the supply-demand balance as much as possible. But we would be keeping ourselves ready to move more rapidly, and with less adverse effect on land use and management, when necessary.

It is easy to see that a voluntary set-aside program could be abused if farmers were allowed to bring any kind of land into production for a few years, establish a crop history, then "retire" it again to take advantage of set-aside benefits. That problem can be largely addressed by passage of the so-called "Sodbuster" bill, S. 663 and H.R. 1011. These bills would identify certain highly erosive lands -- classified on the basis of the best scientific measures that 100 years of soil science have developed -- which would not be eligible for USDA programs if converted to cropland.

These bills would stop the abusive expansion of cropping onto lands that simply cannot tolerate such intensive use. This is vital, or the Nation will continually need to pay the bill when speculators and profiteers break out marginal lands, then dump them on the farm programs for support. We have seen millions of acres of such lands plowed out in the last 5 years, and today we are giving PIK payments to farmers for not growing wheat on land that should never have been plowed out of grass. Within a few years, we will be faced with the choice of either paying someone to plant grass back on those soils or watching them dry up and blow away. We must stop that kind of abuse, or neither the land nor the federal farm programs can survive intact.

These reforms would help settle the administration of base acreages and cropping history and provide incentives for good management and conservation rather than over-expansion and abuse, but some further counter-cyclical efforts would also be helpful. During times of depressed farm prices, when acreage restrictions and income support payments are needed, the NACD favors some form of cross-compliance where those farmers who accept government income support payments meet minimum soil conservation management standards. We also favor a "Green Ticket" approach where farmers willing to install a full conservation system on their entire acreage are given additional bonuses in the USDA income support programs.

During periods of strong markets and no income support programs, we favor the use of tax incentives -- both investment tax credits for long-term investments in land improvements and a "Green Ticket" tax credit for having a locally-approved conservation system in place on their land.

The combination of these two approaches would tend to support conservation management during the low side of the farm economic cycle, and encourage the maintenance of conservation systems and additional investment in conservation practices during the high side of the cycle.

In addition, we believe future farm and conservation policy must do a better job of reaching out to its partners and supporters in state and local government.

Virtually every state has a soil and water conservation program that provides the basis for priorities to be established on the basis of locally-determined needs. That is a much more finely-tuned method of priority setting than will ever be possible at the federal level, and we feel USDA programs should respond directly to these state programs as a basis for priorities. We must also remember, however, that these state programs were not designed to replace the federal effort, but to supplement it. If the federal government uses the willingness of states as an excuse to withdraw federal program support, the entire state planning process must begin anew in light of the new situation that would be created.

We feel the state and local governments should have the leadership role in crafting any kind of regulatory efforts that are needed to supplement federal conservation programs. The "Sodbuster bill," for example, could reduce federal financial incentives that favor the plow-out of marginal soils, but it will not prohibit such actions. Federally-established "prohibitions" of any kind have proven to be crude and unwieldy tools in the United States and are particularly unacceptable in dealing with matters of land use and management.

Many states and localities are considering the use of some sort of regulatory tool to stop flagrant land abuse. As one example, the 640 citizens of Petroleum County, Montana are considering a local ordinance to require that farmers get a permit from the local soil conservation district before they plow out any grassland, and those permits will not be granted for land that is incapable of supporting cultivation. We don't know, of course, whether or not they will actually establish this ordinance, but if they do, you can bet it will be designed to fit the conditions in that county, and will be supported by the majority of the farmers and citizens who will be affected by it. Where regulations are needed, that is the place to establish them, not in Washington, D.C.

But the existence of that ordinance -- or the existence of any active state or local program -- can be a significant contribution that makes the federal conservation programs far more effective. States and localities can assume roles, hire people, carry out demonstrations, and involve local citizens in ways that federal agencies find difficult or impossible, but which make the federal dollars go much further or be much more effective.

This partnership should be encouraged, we feel, by establishment of a matching grants program as one portion of the federal soil conservation program. We do not feel such a grants program should replace other USDA efforts, nor should grants be used to shift funding responsibility for research, education, technical assistance or cost-sharing away from the federal government. We do not envision the grants portion of the federal program ever being too large, for the danger there is that state and local governments become too dependent on the grants, and too likely to be hurt if the federal government backs away from its commitment at some future time.

But a grants program, at this time, would be most helpful in getting additional input from state and local governments in the conservation program. The authorities were established in the 1981 Farm Bill. The Administration asked for funding of the Grants program in their FY 1983 budget, but tied that funding to severe reductions in other programs -- a trade Congress was unwilling to make. Recently, the Senate has included $10 million for grants in a Supplemental Appropriations Bill that is headed for a Conference Committee. We feel strongly that the Congress could take a significant step forward in broadening the financial base and the total support for soil and water conservation if they would approve that appropriation.

We are in a period when capital is scarce for private businesses as well as public programs. Reduced spending at all levels of government is imperative, and the fact that the real rate of interest is roughly double the historic rate has made capital both scarce and expensive for private sector investments in land productivity as well.

During these times, we need to pay particular attention to financing those public and private investments that contribute to productivity, national economic strength, and stability. We think an aggressive, effective federal soil and water conservation program, tied closely to a farm program that encourages farmers to stabilize land use and treatment systems, and operated in close cooperation with state and local governments, is one such sound public investment.

Today, the United States spends just under $1 billion on all its federally-funded soil and water conservation programs. That is about one-half of one percent of the projected deficit in the federal budget this year. It is one-twelfth of what we will spend on foreign aid; less than one percent of what we will spend on defense. That is not a very high priority, and we are convinced it needs to be higher. Money doesn't solve problems, we know, but effective public programs don't happen by accident. We think the balance has shifted too far away from sound conservation investment in recent years. This balance needs to be restructured to help assure a strong, viable economic future for the Nation.

Mr. **Tosterud**. Thank you very much, Mr. Sampson. For the record, I am Bob Tosterud, staff economist with the Joint Economic Committee.

Chairman Jepsen had a couple of questions that he wanted to pose to each member of the panel. I'll go through them quickly. Time is short.

To each member of the panel: Do you think farmers should comply with a minimum conservation standard in return for Federal assistance? Should Federal commodity and income support programs include enhancements for soil and water conservation?

Governor Olson.

Governor **Olson**. I would say yes to both questions, risking some reaction in my home State from certain elements of our agricultural economy. But I come from a family farm. I am still active in the Olson family farm operation. I believe that my family, my friends who are in agriculture in North Dakota would tend to agree that, yes, for the long term, the answer should be yes.

Mr. **Tosterud**. Mr. Berg.

Mr. **Berg**. My feeling is that, to the extent that we can encourage people to do what should be done——

Mr. **Tosterud**. Microphone, please.

Mr. **Berg**. Oh. To the extent that we can encourage people to do what they are going to do, they, too, are going to invest their money and their time and effort in what should be done. We should encourage what we have had a good record on here over 50 years. But there has to be some backup. There has to be some consistency in what we're doing.

In the farm programs that have been offered, in the commodity area, in too many cases, as we all know who have worked in the field for many years, the conservation farmer is penalized in terms of the acreage that is finally available for those types of programs. Some people farm the programs along with the land. They are ready for the cycle that comes along like we have now. Those lands that I have observed over my experience that should not have been brought into production should not be rewarded, and they are under our present way of doing business.

Now there has to be backup, not only in the Federal activities, but I think at the non-Federal level. I think the States can encourage some sort of a minimum standard of compliance that needs to be met that can be administered by their local conservation districts in cooperation with the State and Federal programs that are in place.

I also strongly feel that what we have here is an opportuntiy that will encourage a lot of other people to look with more favor on the soil and water conservation programs at the Department of Agriculture than they have in the past and on the commodity programs. I have been able to straddle between the agricultural groups and the environmental groups, although not always successfully, the concerns of both. And there are people out here that are willing to support. The fish and wildlife habitat needs to be encouraged on the private lands of this country. That's where most of the upland game comes from.

We need to be concerned about water quality, as my Congresswoman, Representative Holt, mentioned. And I am a close neighbor of the Chesapeake Bay. What we do there attracts a lot of support for the things that agriculture needs to do. There are people in this country beyond the farmer, the rancher, the people that are concerned about farm policy, that our taxpayers have a right to have some results from our public spending and I think that they are going to be watching as to how responsible agriculture and the land users are in this regard.

So the more we do to take the leadership and set the pattern, I think the better it will be handled.

Mr. TOSTERUD. Thank you, Mr. Berg. Mr. Gray.

Mr. GRAY. Yes, sir. I think, first of all, that it is so clear that the commodity programs are really the driving force here. And if we cannot move conservation policy into the commodity programs, we're really never going to accomplish an awful lot of soil conservation, because for years they dictated what farmers plant, how much acreage goes in, what comes out and so forth. And, of course, as you can see by the chart, that we still have a lot of acreage that could come into production. And if they do not have, cannot get those commodity support programs if they bring that kind of highly erosive land into production, it's certainly going to discourage them.

I am not entirely sure that a straight cross-compliance kind of program where you need a conservation plan in order to take part in the commodity programs is that workable, quite frankly. I think the legislation that Senator Armstrong proposes to discourage any more land from being brought in—in other words, you won't be eligible for that program—is a very good idea. But I think that the only way we're going to get some of that land that's currently in production, that's already been brought in, out, is through a bidding process for a long-term soil conservation reserve, get it out and then don't let any more of it come in.

That seems to be the key answer. And if you can work those two in tandem, you're going to reduce erosion and then you're going to be able to put the money that not only States, like Governor Olson in his State, are coming up with staff people, they're coming up with more money.

The States want to do a lot more. But they really want to put those funds on that land for conservation practices that will return them the most cost-effective kind of conservation work. And if we can keep that highly erosive land out, we can concentrate on some of that land that is eroding at a rate more than we want to see it, but get the conservation practices in place. And I think that those are the key elements.

Mr. TOSTERUD. Thank you, Mr. Gray. Before we leave you, your soil conservation reserve is a very interesting proposal. Do you believe legislation may be necessary to implement it?

Mr. GRAY. No, quite frankly, I don't, particularly if a pilot project would be put in place. I don't think that that would take any legislation at all and even on a national scale, I'm not sure of that, but I don't think that legislation would be required, either.

Mr. TOSTERUD. All right. Thank you very much. Mr. Sampson.

Mr. SAMPSON. Your question about whether or not producers ought to be required to install conservation as a part of being eligible for farm programs is one to which I spoke in here. My answer to that is yes, but it shouldn't be done first.

Our argument today, as I have tried to make the argument, is that the tremendous economic pressures in the manner in which the commodity programs have been administered have moved farmers on millions and millions of acres to overproduce those commodities and underutilize voluntary conservation incentives because of economic penalties built into those programs, then I find it a little out of character to suggest that because they wouldn't go in with minor incentives because of the serious disincentives that we had built into those programs, that then we ought to force them to do it and then penalize them as a result.

So it seems to me that, first, we clean up the disincentives in the programs themselves, and then I think we are rational as a public to require that people have a modest degree of conservation compliance as a precondition to accepting that income support.

But I do think, first, we've got to clean up that disincentive section of that program.

Mr. TOSTERUD. Thank you very, very much, Mr. Sampson. One additional question. We've got about 5 minutes, but it's one, I think, that should be asked. I suspect that there are a lot of farmers out there anticipating a question like this.

Let's assume that after 4 consecutive years of record low income, U.S. agriculture experiences a period of high demand and high prices, a situation which would call for fence-row to fence-row production. I suspect that you would ask farmers to constrain themselves and not plant marginal lands as they did in the 1970's.

First, what kind of an incentive can we possibly provide farmers not to respond to this boom? And second, if farmers did restrict production, have you thought about the implications for food costs and exports?

Governor Olson, I know you're from a State that is anxiously awaiting an economic recovery.

Governor OLSON. So is its Governor. [Laughter.]

I wish I had the perfect answer for you, Mr. Tosterud. Knowing especially how our producers will react, we'll almost have to tie them down to keep them from planting fence-row to fence-row unless there's a rather strong incentive built in not to. And that incentive is going to have to be money, because we have suffered in the most agricultural of agricultural America, the most agricultural State. We have suffered from the very difficult agricultural economy we have found for the last several years. I couldn't ask them to voluntarily do so. It will have to come in the form of some kind of compensation. It will have to come from the Federal Government. And it will have to come in connection with, we hope, a rational and responsible long-term policy.

That's why it's so urgent to get to the business at hand that Senator Jepsen has been so articulate in expressing, and this committee. We need to do it and do it now so that when that cycle flips, we've got some long-term something that our farmers can see as a framework within which they will fit for the future.

But I don't have the perfect—I don't know what the program is. I'll certainly support it when somebody finds it.

Mr. TOSTERUD. Thank you, Governor. Mr. Berg.

Mr. **Berg**. Just briefly, the RCA process did try to project a future between now and the turn of the century and on to 2030. Now that's an awful long projection in any event. But it makes a lot of difference as to how much you crank into the equation as to what we think will be the demand on our land in terms of foreign exports.

We do not put pressure on our land and water resources just for domestic production. Two out of five acres are producing for foreign use. It can be and should be held, if possible, made better. But we need to recognize that there are several factors that come together. And if the pressures come, it will be not just because we consider what domestic needs are. That's why we need a comprehensive policy that says, when we go for all-out production, we recognize that conservation is part of that. It's part of the picture as to what we do with foreign exports, how much we invest in scientific research to improve our technology to keep our yields building, and several other factors that have not necessarily in the past been tied together.

Ten years ago when we went out for all-out production, we went out with a produce-and-protect campaign. The protection end of it dropped off. During that 40 years, we in the SCS lost 2,000 of our field-based people. Now that says something for not getting our act together. If we want to get ready for the time in which high prices and all-out production is going to be back again as a demand on our land users, let's be prepared to help them do what they, I think, most of them will be willing to try to do in terms of being stewards of the land.

Mr. **Gray**. I think that that question is really one of the key questions of this hearing, whether or not in a few more years, if we have an incentive so prices go up and farmers are encouraged to plant fence-row to fence-row, what's going to happen. That's why we feel in our program that it is essential now to do these two major recommendations. Then the Government will at least have some ability to control how much of that land comes in.

In other words, the incentives and the penalties that are in place under Senator Armstrong's program for discouraging more of that land coming into production, and our program to take some of that land out of production, we could at least have some, the Government would have some way to control how much of that land comes back in. And there could be both incentives and penalties worked into that program.

I think that that is a very, very key part.

For some reason, in the past 10 years, when we brought more land into production, more of it seems to have come out of that red category than out of the green category. I don't know why. I would speculate that the reason for that is some of that prime land in the green category, the potential category, may be in smaller inclusions in areas where it is not maybe highly accessible. But it seems that in the Great Plains and in the Midwest, more of the land that came into production was the more fragile kind of land.

So it's essential today that we get these programs in place so that we don't run that same cycle again 4 or 5 years down the road. And I think that that is the key question of this hearing.

Senator **Jepsen** [presiding]. Land that was brought into production because of the ground rules and programs set up by the Government. Investors could come in, as they did in Colorado, and in this particular instance, they come from Canada, buy up land, then bust the sod and qualify for Government programs, which would mostly pay for the land.

Mr. **Gray**. Mr. Chairman, there was a comment just recently in an article that I think is very appropriate in Time magazine that dealt with this question of sodbusting, breaking up some of the fragile soils. And it said that a number of people are farming the Federal crop programs rather than farming the land. And I think that's got to stop.

Senator **Jepsen**. I agree.

Mr. **Sampson**. Mr. Chairman, I think it's important, too, that I steal a poke at Bob Gray's chart and point out that most of the land that came in during some of the big plow-out in the Great Plains is not in the red category. It's so much worse, it's not even on the chart. [Laughter.]

It is so bad that nobody in 1977 called it potential cropland. It's out in that land that everybody agreed had no potential for long-term future cropland. And it's not even on the red. It's clear off. He doesn't have a big enough piece of paper.

The question that was asked us was what if a boom cycle returns? Let's first of all say that we certainly hope so. And we hope that there's some profit back in American agriculture. But let's hope that some things are in place.

First of all, the Armstrong bill. It will not prohibit people from bringing poor land in. But it will put them on the private market and it will not create the promise of future subsidy.

Senator **Jepsen**. They will not do it at Government and taxpayer expense.

Mr. **Sampson**. At taxpayer expense. And I think that's very key. It's very key that we hold in the farm home loan provisions and the crop insurance provisions because that discourages the second buyer, which is where the speculator makes his money.

Second, let's hope that we go into that expansion period with a permanent set-aside program that has been itself set aside for a moment, but where a farmer who desires to can, in fact, voluntarily rotate land out and keep his crop rotation records intact for the program, knowing that we're going to go back sooner or later and he won't get penalized in the process.

That would be second.

Third, let's do some of the things that you have been taking the leadership on in terms of investment tax credits so that when money is flowing into agriculture and tax liabilities are created, that long-term investments in land productivity are an attractive place for private investment.

As I looked this morning at the latest figures on farm debt, I know where a lot of farmers are going to need to put a few of those first profits. But hopefully, some of it can go back into the land to build productivity for the future as well.

Senator **Jepsen**. Today, we have two panels of witnesses whose testimony focuses on the choices available to us in trying to integrate conservation objectives with other agricultural policies.

Before we change panels I would like to have specific advice and suggestions from each one of the panel members with regard to the following question. Each of you has alluded to it and talked about it in your testimony. Given the huge amount of land that has been set aside as a result of PIK, many suggest that this is the time to take a portion of that land and permanently place it out of production.

How would you propose to do that?

Governor **Olson**. Well, we have to have an incentive program. I think, Senator, before you returned, I had responded in the sense that the monetary incentive has to be here. I think we have a wonderful opportunity at this point, at least I can tell——

Senator **Jepsen**. I think it's a good opportunity, too. But, in fact, we're right in the middle of verbal negotiations with the USDA regarding the development of a potential second-year PIK program. There's even some question as to whether they're going to have one. Be that as it may, it's time now to put it in place. Unfortunately, we didn't do that before it was announced the last time.

But my question simply is one that we have to wrestle with and address on the firing line.

Governor **Olson**. I like the bidding approach that Mr. Gray described and I would support that.

Senator **Jepsen**. If I may move to Mr. Berg. Do you have a specific proposal for taking land already out of production because of the PIK program and placing it permanently out of production?

Mr. **Berg**. Yes, I do. It's simply this. I think the Department ought to go all out with all of their field-based offices and the people that are there, including the county agents, to find out what the land users have decided to do. They have made the decisions about what they consider the best use of their land for this year under this program.

And to the extent that we can find out what kinds of lands they have set aside and what are those fragile lands that should not be returned for production next year or perhaps for the balance of this decade, let's see what we can do to hold those lands in that kind of a nonintensive use. And if we can run a PIK program at the expense that it's now building to with some doubt about whether or not when they came up here in December and needed legislation and then went without it, it seems to me that we could capture, as Bob has said here, those 10 or 15 million acres, at least until we get a program in place.

Senator **Jepsen**. OK. With your knowledge of the national operation and the ASCS and so on, how long will it take the PIK program to identify and inventory these areas. Give us a reading of the potential there is?

Mr. **Berg**. It has to be done, I think, between now and the time they harvest the crop.

Senator **Jepsen**. Is that physically possible, to your knowledge?

Mr. **Berg**. Yes; it is. Yes; it is.

Senator **Jepsen**. Could they do it in a week?

Mr. **Berg**. I think they could do it between now and the time that the land is covered over with snow and, of course, we ought to concentrate in the areas in which we know there are serious problems.

Senator **Jepsen**. By the same token, we need to announce the PIK program, if we're going to have one, by late August, early September.

Mr. **Berg**. I know that.

Senator **Jepsen**. Can we do it between now and then?

Mr. **Berg**. Yes; we can if everybody turns out to do it, to find out what the land users have done this year.

Senator **Jepsen**. All right.

Mr. **Berg**. I think if we concentrated our efforts, we could get that information. No question about it. Let's call on the conservation district governing boards in the 3,000 counties. We don't have to go that broad to find out where the problem areas are. Let's call on the literally hundreds and, in some cases, thousands of experts out here on that local county basis as to what the land users have done and find out as quickly as we can.

Senator **Jepsen**. Mr. Gray.

Mr. **Gray**. Mr. Chairman, I would like to just mention a couple of things. Of course, I would like to see our program put in place that I mentioned earlier because I think that's the most workable and the quickest way that we can achieve this.

But I would like go to back to the 82 million acres for just a second. A lot of people would just assume when you talk to people around the country that the worse acreage would be taken out, the most highly erosive land. It doesn't always translate into that when you randomly take that land out of production because, as you know, it was a fairly wet, late spring in the Midwest this year and a lot of fairly flat fields that have had a high water table have been taken out, put in the PIK program.

So you can't necessarily say that it will be a one-on-one exchange.

But our program that we are proposing here would, on a bid, contractual basis with the farmer, in other words, voluntarily taking that land that's in the red, and almost every farm has some of that, he'd be eligible to take that land out for a 7- to 10-year period under a bid basic. And using the bidding procedure, of course, you're going to get that land out a lot cheaper than if you offered a figure that the Department established.

So you're going to get your money's worth and getting it out of production.

Then you would have a release mechanism built in that in the event of an emergency that some of that land needed to come back in. But you could then get an ideal that in order to determine which of that land you would allow back in because some of that should stay out. But I think that is the procedure. And we have the information. It's possible to do it. In fact, I'm going to see Bill Lesher next Wednesday. I've written him a letter and he's interested in our program. I'm going to lay this out to him. I think it's possible to do it before the end of August and we would certainly be glad to help.

Senator **Jepsen**. Advise us when you have that meeting. I'd like to have one of my staff sit in. In fact, if I might suggest, I think that would be advisable for you to do.

Mr. **Gray**. Very good. [Laughter.]

I will do that, Mr. Chairman. [Laughter.]

Senator JEPSEN. Mr. Sampson.

Mr. SAMPSON. The question about the PIK acreage, I think, is germane. There are a lot of things that can be done right now. But Bob has got a very excellent point. The farmers did not necessarily take out the most erosive lands. We had farmers that took out some of their better land because they had a weed problem.

Senator JEPSEN. Well, some of them are just letting their bean ground take a rest for a year. They were going to do that, anyway.

Mr. SAMPSON. Precisely, and taking advantage of this. So we need to have the bidding process, but it needs to have a land capability angle, Bob. It needs to have that worst land only be the land that is eligible for the bidding.

Insofar as knowing what PIK has done, I think we can find out. The spring has been so late and so funny that most farmers we are talking to are trying to get the crops that they are trying to still grow this year somehow under control and they're going to do PIK next, if next ever comes, and if the weather ever lets them.

So I presume that one of our problems with doing it, as Mr. Berg rightly pointed out, we can learn, but it's a little early yet out in much of America to really know what those people are doing. And then by the time that they get to it, as you point out, your schedule is going to press you very hard because you are going to need that very instantly.

We'd be happy to help the conservation districts, though, and I think there are ways that we could at least get some samples, enough samples to let you know in a reliable way what is happening.

Senator JEPSEN. I thank the panel. I would like to share with you—just for information purposes—that earlier this morning, I met with the National Endowment for Soil and Water Conservation. That's a private sector initiative that I'm sure you're all familiar with.

This morning, the newest member—the Chicago Board of Trade—donated $8,000 on the spot. Bob Dole was there and jumped right in and it was given to a local group in Chase County, Kans., to buy a seed tiller. It will be shared with other farmers in the area for conservation tillage. But this is a move in the right direction. I thought I'd share it with you. Thank you.

Mr. GRAY. Mr. Chairman, I would like to go on record as personally thanking you for your efforts to implement a farmland protection policy act. As you know, very soon the criteria are going to be published in the Federal Register.

Senator JEPSEN. Yes.

Mr. GRAY. We really appreciated your efforts to push the department, mainly OMB, to do that.

Senator JEPSEN. Thank you, Mr. Gray. Thank you and here we'll take a short recess.

[A brief recess was taken.]

Senator JEPSEN. Our next panel will be composed of Burton English, Sandra Batie, Linda Lee, and Pierre Crosson.

Burton C. English is a staff economist at the Center for Agricultural and Rural Development, which is affiliated with Iowa State University at Ames, Iowa.

Sandra Batie is associate professor of agricultural economics at Virginia Polytechnic Institute and State University. Welcome, Sandra.

And Linda Lee is assistant professor of agricultural economics at Oklahoma State University. I used to know a song that talked about Texas and all those universities down there and it ended by saying, don't send my son to OU—that will never do, or something like that. [Laughter.]

That's all right. That's not your school.

Pierre Crosson, who is a senior fellow, Resources for the Future.

Welcome to all of you. I would advise you as I did the other panelists, that your prepared statements will be put into the record.

You may proceed in any manner you wish. We'll start with you, Mr. English.

STATEMENT OF BURTON C. ENGLISH, STAFF ECONOMIST, CENTER FOR AGRICULTURAL AND RURAL DEVELOPMENT, IOWA STATE UNIVERSITY, AMES, IOWA

Mr. **English**. I wish to thank you for inviting me to testify here. You will note that the prepared statement that was presented, that I am presenting here, was written by both Earl O. Heady and myself. I send his apologies for not being able to make this hearing, but his schedule would not permit it.

There have been several complex forces that have resulted in increasing soil erosion over the past decades. I am sure throughout your hearings you have heard about these complex forces. One factor has been the change in technology which eliminates crop rotations. These services, the services that crop rotation has provided in the past, can now be provided through chemical inputs. You don't need a legume any more. You can apply fertilizer.

Consequently, farmers have moved to a near monoculture in growing only corn and soybeans in the Corn Belt. Largescale machinery and equipment has encouraged this specialization. Now, a large combine cannot be shifted to produce milk, whereas before, labor could be shifted from one enterprise to another without very much cost. And specialized dairy equipment can't be used to produce crops. Hence, we have many specialized farms, not general farms.

Increased soil erosion also was encouraged by rapidly growing exports and high commodity prices in the 1970's. During this time when supply management programs were abandoned, over 50 million acres which had been set aside was shifted into crops. These economic conditions encouraged farmers to farm their land hard.

Iowa State University, through its Center for Agricultural and Rural Development [CARD] has been working with the USDA on the Resources Conservation Act. The ISU-CARD models were used to evaluate the impact of various soil conservation goals on agricultural productivity, commodity prices, farm income, food prices, export possibilities, and other related variables.

In addition, we are continuing the analysis in preparing for the 1985 RCA. These models that we have used allow the expression of the interrelationships among regions of the Nation and land groups or soil types as potential soil programs are implemented. For example, they will show that some parts of the Southeast or other regions with highly erodable land will sacrifice income and land values if conservation programs bringing soil loss to t^5 levels are implemented. Simultaneously, other regions without erosion hazard will gain in farm income and land values.

I will summarize some of the findings, but not all of them. To do so would take way too much time. I also caution the use of national data to generate national policy, and you must be aware of the regional impacts that could result.

From our analyses for the RCA evaluation, we believe that an enlarged and more active national soil conservation program should be put into effect. A national program is needed because of the interaction among regions and States of the country. Some aspects of soil conservation programs can be left to States and local governments. For example, Iowa has a soil conservancy law which provides a mechanism for controlling runoff and erosion. However, an analysis that was conducted by CARD shows that if Iowa fully implemented this law while other States did not, net farm income in Iowa would decline while farm income in the rest of the nation would increase.

Studies also show that if supply control programs of the nature of PIK in force in 1983 or similar programs in effect over most of the period between 1950 and 1972 were converted to a set of soil conservation subsidies or cost sharings on the most fragile or erodable land in the Nation, supply could be restrained enough to maintain commodity prices at levels attained by conventional supply control or land set-aside programs. The cost of such a conservation program could be considerably less than the PIK program in effect now.

Fragile or highly erodable soils would be switched from intensive farming and would be concentrated by region. Farmers in other regions not susceptible to heavy erosion would gain through reduced national grain supplies and higher commodity prices. However, since these regions of fragile soils switching to less intensive farming would not gain through higher market prices for grain and cotton, they would need compensation by the public to offset their income reduction.

Some regions of highly erodable soils, such as western Iowa, western Tennessee, and the Palouse area, may not need to be shifted entirely out of row crops and grain production. However, the productivity hazards of soil erosion in these areas cannot be controlled solely through conservation tillage. Adequate control of erosion in these areas can be attained only with the use of contouring, strip cropping and terracing—practices which in many instances are not profitable to the individual farmers.

Society's conservation goals can be best attained in these cases by subsidies and cost sharing by the Government which causes these practices to be economic for farmers. In terms of national productivity, development and conservation goals, these costs should be borne by the Federal Government rather than the States, local governments, and individual farmers.

In addition, we believe that radical changes should be made in the allocation of soil conservation resources. The areas targeted should receive a greater portion than those that don't need them.

Expenditures and technical assistance should be shifted entirely from areas without an erosion hazard and concentrated in land areas where erosion is severe.

Analysis by our models indicate that future productivity of U.S. agriculture will be great enough and that we have the capacity to conserve our fragile lands while producing food abundantly for domestic use and export. Our estimates indicate that exports can increase by as much as 3 percent per year up to the year 2000 through productivity growth from new technology and conversion to crops of some of the potential acres that were indicated in that chart over there and still meet our demands.

Some very effective conservation practices are profitable to farmers over the long run. An example is conservation tillage. We just completed a study covering all major land resource areas of Iowa and we found that conservation tillage was a profitable practice for both owned and rented farms once ownership of the appropriate machinery is obtained.

Hence, in the interests of both farmers and society, we believe that cross-compliance should be strongly implemented for conservation tillage in relation to all other public programs. Farmers should be required to use conservation tillage practices in areas where it's relevant and profitable if they participate in programs which provide credit from public facilities or from price supports, et cetera.

Where farmers still have conventional tillage machinery which will last some time until fully depreciated, publicly acquired conservation tillage equipment should be made available for farmer use. Iowa is one of the States, I believe, that is doing that. Individual counties do have conservation tillage equipment that farmers can rent at some cost.

Over the past three decades, there has been major upheaval in farming technology. This, along with the neglect of our soil resources, has resulted in excessive soil erosion. This national problem cannot be corrected in the next 5 years, even if adequate technology, personnel, and financing existed. All three of these have been lacking in the past and are still in short supply.

Some appraisal like the RCA is required so that the most critical long-term problems concerning soil and water resources can be solved. Lacking this, a policy of a little bit here and some over there but not enough where it's needed most will continue.

Additional information must be sought to answer some of the questions tillage practices carry with them. Although in our studies we found that reduced tillage practices are cost effective measures for reducing soil erosion, we have little information as to the yield variability of various soil-conserving practices. We cannot address the long-term impacts of yields when adopting these impacts on various soils. We can in general, but we can't when you get down to a farm or farmer.

I call for a cooperative effort between the Extension Service, the Ag Experiment Station, ASCS, SCS, and ARS in setting up demonstration plots and other research methods to provide answers and information to our agricultural producers. Demonstration farms need to be selected and promoted. This may be in connection with the PIK program, if you desire. Demonstration farms could be commercial farms with a guaranteed yield supplied. Any yield above this guarantee, using a certain tillage practice, the Government could sell and put the proceeds into additional conservation efforts.

Education needs to take place so as to reduce the uncertainties of new practice adoption. Public expenditures on new tillage equipment should be made, and this equipment should be made available to farmers on a variable cost basis. Areas with high erosion rates and/or those with threats on productivity should be targeted with additional funds made available to these areas.

Finally, it seems unfair for taxpayers to provide the means and resources for production loans and still pay for erosion prevention. Thus, cross compliance between governmental support and erosion control programs should be implemented. Thank you.

[The prepared statement of Mr. English follows:]

PREPARED STATEMENT OF BURTON C. ENGLISH AND EARL O. HEADY

Good morning, ladies and gentlemen. My name is Burton C. English. I am a staff economist with the Center for Agricultural and Rural Development located in Ames, Iowa. My area of expertise is in agricultural economics and policy with a special emphasis in soil conservation. I wish to thank you for inviting me here to testify. You will note that the testimony that I am presenting here was written by Earl O. Heady and myself. I send his apologies for not being able to make this hearing, but his schedule would not permit it.

Several complex forces have resulted in increased soil erosion over recent decades. One factor has been the change in technology which eliminates crop rotations to provide soil fertility and pest control. These services can now be provided through chemical inputs and a rotation is no longer necessary. Consequently, farmers have moved to a near monoculture in growing only corn and soybeans in the Cornbelt. Large-scale machinery and equipment also has encouraged this specialization. In earlier days when labor was a more important input in farming, it could be shifted readily among crops, milk cows, hogs and feeder cattle. Now, however, a large-scale combine can not be shifted to produce milk or pork and specialized dairy equipment can't be used to produce crops. With the high fixed costs attached to this large-scale machinery, farmers attempt to produce a large value of one commodity or similar commodities (e.g. corn and soybeans which use the same machinery). Hence, we no longer have many general farms but instead have specialized farms which produce just hogs, produce just corn and soybeans, etc. Large machinery not only has encouraged greater farm specialization but also tends to discourage such soil conservation practices as contouring, strip cropping and terracing.

Increased soil erosion also was encouraged by rapidly growing exports and high commodity prices in the 1970's. During this time when supply management programs were abandoned over 50 million acres which had been in set aside was shifted into crops. These economic conditions encouraged farmers to "farm their land hard."

Excessive erosion on fragile soils can both reduce long-run productivity and endanger the environment. It is estimated that 80 percent of stream sediment comes from agricultural lands.

Iowa State University (ISU), through its Center for Agricultural and Rural Development (CARD), has been working on the Resources Conservation ACT (RCA) evaluation in cooperation with the U.S. Department of Agriculture (U.S.D.A.). The ISU-CARD models were used to evaluate the impact of various soil conservation programs (or lack of programs) on agricultural productivity, commodity prices, farm income, food prices, export possibilities and related variables.[1] The ISU-CARD models and analysis is continuing in cooperation with U.S.D.A. in preparation for the 1985 RCA evaluation. These analyses are made by models or quantitative models which include all major land classes in 105-223 agricultural regions of the United States. They allow expression of the interrelationships among regions of the nation and land groups or soil types as potential soil conservation programs are implemented or not. For example, they show that some parts of the Southeast or other regions with highly erodable land will sacrifice income and land values if conservation programs bringing soil loss down to t levels are implemented. Simultaneously, other regions without an erosion hazard would gain in farm income and land values. Many other interactions occur among regions and land groups as alternatives in soil conservation policies or erosion patterns are allowed. Some findings resulting from this modeling and analysis work can be summarized relative to questions posed for this hearing.

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[1] See the following publications which explain in detail the results method of the analysis: English, Burton C. and Earl O. Heady. Short and Long-Term Analysis of the Impacts of Several Soil Loss control Measures on Agriculture. CARD Report No. 93. Center for Agricultural and Rural Development. Iowa State University, Ames, 1980; Daines, David R. and Earl O. Heady. Potential Effects of Policy Alternatives on Regional and National Soil Loss. CARD Report No. 90. Center for Agricultural and Rural Development. Iowa State University, Ames, 1980; Wade, James C. and Earl O. Heady. A National Model of Sediment and Water Quality: Various Impacts on American Agriculture. CARD Report No. 65. Center for Agricultural and Rural Development. Iowa State University, Ames, 1976; Boggess, William G. and Earl O. Heady. A Separable Programming Analysis of U.S. Agricultural Export, Price and Income and Soil Conservation Policies in 1985. CARD Report No. 89. Center for Agricultural and Rural Development. Iowa State University, Ames, 1980.

From our analyses for the RCA evaluation, we believe that an enlarged and more active national soil conservation program should be put into effect. The RCA process should be continued but its findings should be implemented as a national program. A national program is needed because of the interaction among regions and states of the country. Some aspects of soil conservation programs can be left to states and local governments. For example, Iowa has a soil conservancy law which provides a mechanism for controlling runoff and erosion. However, an analysis shows that if Iowa fully implemented this law while other states did not (most states do not have a similar law) net farm income in Iowa would decline while farm income in the rest of the nation would increase.[1]

Studies also show that if supply control programs of the nature of PIK in force in 1983 or similar programs in effect over most of the period 1950-72 were converted to a set of soil conservation subsidies or cost sharings on the most fragile or erodable land in the nation, supply could be restrained enough to maintain commodity prices at levels attained by conventional supply control or land set-aside programs. The cost of such a conservation program could be considerably less than the PIK or supply control program in effect now or the set aside programs of the 1960s. Fragile or highly erodable soils would be switched from intensive farming and would be concentrated by region. Farmers in other regions not susceptible to heavy erosion would gain through reduced national grain supplies and higher commodity prices. However, since those regions of fragile soils switching to less intensive farming would not gain through higher market prices for grain and cotton, they would need compensation by the public to offset their income reduction.

Some regions of highly erodable soils (e.g., western Iowa, western Tennessee, the Palouse area of Washington, etc.) need not be shifted from row crops and grain production. However, the productivity hazards of soil erosion in these areas cannot be controlled solely through conservation tillage. Adequate control of erosion in these areas can be attained only with the use of contouring, strip cropping and terracing -- practices which in many instances are not profitable to individual farmers. Society's conservation goals can be best attained in these cases by subsidies and cost sharing by the government which causes these practices to be economic for farmers. In terms of national productivity, developmental and conservation goals, these costs should be born by the federal government -- rather than by states, local governments and individual farmers.

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[1] Nagadevara, Prasad and Earl O. Heady. Implications of Application of Soil Conservancy and Environmental Regulations in Iowa Within a National Framework. CARD Report No. 57, Center for Agricultural and Rural Development. Iowa State University. Ames, 1976.

The "targeting" of expenditures and resources for soil and water conservation purposes is a program which should be extended and applied more vigorously. Historically, expenditures on soil conservation through technical assistance and cost-sharing practices have been allocated similarly to level areas with no important erosion problem and areas of fragile soils with severe erosion problems. Radical changes should be made in the allocation of these resources. Expenditures and technical assistance should be shifted entirely from areas without an erosion hazard and concentrated in land areas where erosion is severe [Heady, 1952].

Analysis by the ISU-CARD model indicates that future productivity of U.S. agriculture will be great enough and that we have the capacity to conserve our fragile lands while producing food abundantly for domestic use and export [English, Heady, Alt, 1983]. Our estimates indicate that exports can increase by as much as 3 percent per year up to year 2000 through productivity growth from new technology and conversion to crops of some of the 121 million acres of land identified in the U.S.D.A.'s 1977 National Resource Inventory [English, et. al, 1983, U.S.D.A., 1980].

Some very effective conservation practices are profitable to farmers over the long run. An example is conservation tillage. In a study covering all major land resource areas of Iowa, situations , paralleled by other areas of the Cornbelt were studied, conservation tillage was found to be a profitable practice on both owned and rented farms once ownership of appropriate machinery is attained. Hence, in the interests of both farmers and society, cross compliance should be strongly implemented for conservation tillage in relation to all other public programs. Farmers should be required to use conservation tillage practices in areas where it is relevant and profitable if they participate in programs which provide them credit from public facilities, afford them price supports and commodity loans, provide them direct payments for supply control activities and other publicly supported activities. Where farmers still have conventional tillage machinery which will last some time until fully depreciated, publicly acquired conservation tillage equipment should be made available for farmer use.

In general, cross compliance should be used to more readily attain national soil conservation objectives. More study also needs to be given to alternative policy instruments to attain soil conservation objectives. Alternatives include taxes as a penalty for excessive land exploitation, tax rebates and subsidies as an incentive for the use of relevant conservation practices and others. The nation's conservation goals cannot be attained through dependence on market mechanisms alone. Soil erosion often is accompanied by externalities where the farmer making the decisions does not pay all of the costs of soil erosion or realize all of the return for its control. An example is soil loss which causes excess sedimentation of streams, the sifting of dams and reservoirs or causes excessive erosion of downland farms.

Over the past three decades, there has been a major upheavel in farming technology. This, along with the neglect of our soil resources, has resulted in excessive soil erosion. This national problem can not be corrected in the next five years even if adequate technology, personnel, and financing existed. All three of these have been lacking in the past, and I believe are still in short supply.

Some appraisal like the RCA is required so that the most critical long term problems concerning soil and water resources can be solved. Lacking this, a policy of a little bit here and some over there but not enough where it is most needed, will continue.

Additional information must be sought to answer some of the questions tillage practices carry with them. Although in our studies, we have found that reduced tillage practices are cost effective measures for reducing soil erosion, we have little information as to the yield variability of the various soil-conserving practices. We can not address this question. I call for a cooperative effort between the Extension Service, the Agricultural Experiment Station, ASCS,SCS and ARS in setting demonstration plots and other research methods to provide answers and information to our agricultural producers. Demonstration farms need to be selected and promoted. Education needs to take place so as to reduce the uncertainties of new practice adoption. Public expenditures on new tillage equipment should be made, with this equipment made available to farmers on a variable cost basis. Areas with high erosion rates and/or those with threats on productivity should be targeted, with additional funds made available to these areas. Finally, it seems unfair for taxpayers to provide the means and resources for production loans and still pay for erosion prevention. Thus, cross-compliance between governmental support and erosion control programs should be implemented.

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Senator JEPSEN. Thank you, Mr. English. Sandra Batie, you may proceed.

STATEMENT OF SANDRA S. BATIE, ASSOCIATE PROFESSOR, DEPARTMENT OF AGRICULTURAL ECONOMICS, VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY, BLACKBURG, VA.

Mr. BATIE. Thank you, Mr. Chairman. I appreciate the opportunity to speak before the Joint Economic Committee. I am particularly pleased to see that this committee is concerned with the resource impacts of alternative agricultural policies.

Some of the points I intended to make have been made by previous speakers and I will attempt not to be repetitive but rather to emphasize some interesting information that reinforces some of the testimony we have already heard.

We have heard, and I agree, that past agricultural programs have not been conducive to achieving our conservation goals. There are several reasons that this is the case, one of which has been a belief that soil conservation has not really been all that important. I will discuss this for a few minutes and then talk about the information that is available, partly because of the RCA process, and what this information means in terms of insights into improving our agricultural program.

I mentioned that we have a lack of integration of past agricultural programs and conservation programs. It has been mentioned earlier this morning that the PIK program is evidence that we have yet to achieve that integration. The PIK program is diverting 82 million acres out of agriculture and yet, these acres are not being targeted to the critical eroding areas where we know that much of our erosion is occurring from.

There are many reasons that we have not had integration in programs before. One of them is that we have had mainly years of surplus production, and it is very difficult to talk about soil conservation when one is faced with the problems of overflowing silos. The current renewed interest in soil conservation occurred simultaneously with an interruption of those surpluses in the 1970's, as well as with a renewed interest in water quality. Increased visibility of the environmental movement in the 1970's, coupled with, as Congresswoman Holt pointed out, recognition that agriculture is a contributor to water quality problems, placed soil conservation back on the political agenda.

Now, given that we have returned to the situation of recurring surpluses, it pays us to pause and ask, is soil conservation all that important? And, as I believe Mr. Crosson is going to testify, the linkages between soil productivity and soil erosion, and the linkages between soil productivity and water quality are not well known. There are many gaps in our knowledge.

But I am of the school that suggests if we are uncertain, it pays us to be very cautious with the use of our soil resources, particularly since the consequences of being wrong, of having too many conservation investments, is far less devastating than the consequences of having too few.

Furthermore, I believe we are in a situation now where we can achieve significant soil improvements at fairly low cost. This makes the play-it-safe argument fairly persuasive.

Mr. Gray made some very interesting points in his testimony that our erosion is concentrated on very few acres. The statistics that I have, which are similar to his, is that 70 percent of excessive erosion—that is, erosion greater than 5 tons per acre per year—is concentrated on less than 8.6 percent of our tilled cropland. Information available from USDA and from other analyses indicates that we have the ability to meet projected food needs in the near future without using these critical eroding areas. That is, we can remove the critically eroding areas from production at very low cost. Furthermore, USDA personnel Clay Ogg and his colleagues estimate that a program targeted to the critical eroding areas could reduce erosion as much as tenfold at only 10 percent of the current Federal outlay per ton of soil saved.

This suggests that while soil erosion is not endangering our future food supply, at least not in any crisis proportions, we can—for very low cost—take a very conservative route. It will not cost us very much to protect our soil resources and, hopefully, to also improve our Nation's water quality.

Also, we have a revolution in our knowledge base concerning resource conditions that we simply did not have before 1977, and are now able to better make some of these improvments. This knowledge suggests several approaches we can take. We have discussed all of them here today, but I will reintroduce them and make a few additional comments.

One approach is cross compliance which is the provision of benefits from various Federal loan and commodity programs contingent on farmers practicing effecitve soil conservation. Because we are participating in the Joint Economic Committee hearings, I am mentioning Federal loan and commodity programs as possible cross-compliance candidates. I think however that States could get involved in cross compliance, too. For instance, use value property taxation assessment programs at the State level could be made contingent on conservation behavior.

Another approach is the targeting of public conservation investments, cost sharing technical assistance, and education to the lands that will yield the highest returns in onsite improvements and off-farm environmental quality improvement.

On third approach is the designing of any future supply control programs so that we gain conservation improvements. We take out the more critically eroding areas with our supply control programs in times of surplus harvest as well as developing a long-term conservation reserve.

Let me briefly discuss cross compliance programs. If cross compliance occurs with commodity programs, the cross compliance programs are going to be more effective if the farmers that are having the soil erosion problems are the same farmers who are participating in the commodity programs. Unfortunately, this is not the case. For example, west Tennessee has severe erosion problems and yet, has some of the lowest commodity participation rates in the Nation.

Furthermore, if small farms are likely to be comprised of the more erosive lands, and there is some evidence that this is the case, they are probably going to have higher costs to meet soil loss standards and therefore, will have less incentive to cross comply. In this case cross compliance gives incentives to those who may need them the least—the older, the more secure operators managing the larger, less erosive farms.

I recently participated, however, in research that suggests that these concerns, while valid, are not insurmountable and that cross compliance is a strategy that deserves more examination. The research I am referring to was a case study of a hypothetical cross compliance program for farmers in the North Fork of the forked deer watershed in Gibson County, Tenn. This is an area experiencing severe erosion problems and water quality problems and it is also an area where most of the farmers plant soybeans. As a result, the farmers are not participating in many of the commodity programs.

We surveyed the case study farmers directly and searched agency records to determine the farmers' last 5 years of participation in several programs: The ASCS deficiency, diversion, and disaster payment programs; the Commodity Credit Corporation nonrecourse and recourse loan programs; the Farmers Home Administration loans; Small Business Administration loans; and Federal Crop Insurance programs.

We asked the question, had the farmers received enough benefits in the last 5 years, such that if we asked them to cross comply, they would have benefits from the past program participation greater than the expected cost of meeting different soil loss standards?

We found that if the surveyed farmers had access to cost-sharing money equivalent to the current cost sharing rates for the least-cost methods of achieving the various soil loss standards over 50 percent of the fields would meet a 5-ton per acre per year soil loss limit. If we upped the soil loss limits to 20 tons per acre per year, we had a compliance rate of over 90 percent. That is, the owners of these fields did receive enough benefits in the past, when coupled with cost-sharing funds, to adopt conservation practices to bring their fields into tolerance and, in the latter case, to meet a 20-ton per acre per year soil loss limit.

This study is very preliminary. It is a case study, and I fully recognize that we need more information in this area. But is does suggest to me that cross compliance has some promise, particularly if we target it to some of the more highly eroding fields and if we consider a broad array of Federal and State programs.

The second possible strategy I suggested is targeting. Targeting should be directed toward achieving the highest returns in terms of improvement in onsite productivity and off-farm benefits. Unfortunately, we do not know as much as we would like about the linkages between erosion and those two benefits.

This should not preclude us from looking at the information we have and doing some targeting while we wait for the researchers to catch up. Let me give you an example in terms of conservation tillage. Conservation tillage can be profitable in some regions. It can be very effective in reducing erosion rates if used properly. While it can perhaps lead to problems with water quality due to increased chemical usage, it clearly has much to recommend it as a strategy of choice.

Yet, USDA data suggests that conservation tillage appears to have been used mainly on the less erosive lands. Also, current case study work by Mr. Peter Nowak of Iowa State University has found that conservation tillage is often being used in a way that belies its name. Farmers, if asked, say, yes, we are using conservation tillage because they are using conservation tillage implements. But when Mr. Nowak measured the amount of residue that these farmers were leaving, he found only 22 percent of the surveyed Iowa corn farmers and 25 percent of the surveyed soybean farmers were actually leaving enough residue on the land to capture the erosion control benefits that would be possible.

And the sad part about that is they were also not capturing the economic or financial benefits that were possible for conservation tillage. They had a tendency to blame the technique for this and not their management of the technique, and many indicated to Mr. Nowak that they were going to abandon the technique because it did not work for them.

Certainly, here is an area where we could target expertise, technical assistance, education, and cost sharing to get the conservation tillage used properly on more erosive land in such a way to reduce the deleterious environmental impacts and capture the financial benefits.

As we have heard today, we can target other types of conservation investments as well to both productive but shallow topsoils and regions with related severe water pollution problems. Variable cost-sharing payments could be established so that more cost-sharing practices would be available to those farmers who had the more highly erosive farms. This targeting approach, as we heard this morning, is a break with past cost-sharing traditions.

We also heard this morning that it may be appropriate to hook targeting to supply control programs whenever possible, so that when we are diverting acreage, it will be the acres that have many of the erosion problems. Also a long-term reserve to take the worst lands out of production, except when they are needed to meet severe shortage conditions. May be a worthwhile approach.

There is much information still lacking that we could use to improve our design of soil conservation strategies. The includes not only knowledge of the linkages of erosion with farm productivity problems and water quality problems, but also factors that influence adoption of conservation behavior and adverse impacts of any possible strategies that we may design.

But, as you know, Senator Jepsen, the public has indicated in polls that they are interested in soil conservation. They are supportive of efforts. Farmers have indicated that they are supportive. And yet, there's a large discrepancy between attitudes and behaviors. The challenge will be to design new institutions to give the farmers the incentives to conserve the soil when and where it's appropriate to do so.

I appreciate the committee's concern in participating in that endeavor. Thank you.

[The prepared statement of Ms. Batie follows:]

PREPARED STATEMENT OF SANDRA S. BATIE

Mr. Chairman and members of the Joint Economic Committee and the Agriculture Subcommittee, I appreciate the opportunity to participate in these hearings, "Toward the Next Generation of Farm Policy." I am particularly pleased that the Committee is concerned with the natural resource impacts of alternative agricultural policies.

I will proceed today with several arguments.

- Past agricultural programs have not been conducive to achieving soil conservation goals.
- There are several reasons why past agricultural programs have not been integrated well with conservation programs, including the belief that soil conservation was not a matter of much public importance.
- New information provides a justification for public concern with soil erosion and provides insights into possible improvements in agricultural programs.

Past Agricultural Programs

Agricultural programs throughout the last 50 years have contributed to producing a commercial agriculture sector that is not conducive to husbanding the soil resource. The price instabilities that characterize agriculture, the dependence on export markets, the reliance on single crop farms, the reliance on chemically enhanced production, the returns on land as an inflation hedge, all produce disincentives for conservation investments.

Price instabilities can lessen the farmer's incentive to practice conservation by increasing uncertainty. Farmers, faced with unstable incomes, will usually attempt to keep fixed costs low and postpone long term investments, including conservation investments.

The equivalent of one out of every three acres is now planted for the export markets. When grain exports and agricultural prices increased dramatically in 1973, harvested lands were used more intensively and new lands were cultivated. According to United States Department of Agriculture (USDA) data, from 1967 to 1977, over 2 million acres of newly cultivated cropland came from lands with poorer, more erosive soils.

The reliance on single crop production means that whole regions are devoted mainly to grain or soybean production--these crops are typically highly erosive. And, the use of chemical fertilizers and pesticides has reduced the incentive to protect the natural fertility of the soil.

Also, in the past, farmland has been excellent inflation hedge. One study found that over half of the benefit from owning farmland in the years 1920 to 1978 resulted not from what the land produced but rather from the contribution of land to increases in the farmer's net worth.[1] This return can encourage patterns of land use that minimize "holding costs" while the investor waits for the value of land to increase. The attitude is not conducive to the adoption of conservation behavior. High land prices, relative to other inputs, can also encourage the use of land-saving technologies; these intensive farming techniques can lead to soil degradation.

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[1] E.N.Castle and I. Hoch "Farm Real Estate Price Components 1920-78." American Journal of Agricultural Economics 64(1): 8-18 (1982).

These disincentives are strengthened by the existence of commodity price support programs, crop and disaster insurance, as well as capital gains taxation.

Price support programs, for example, can reduce the need for farm diversification by reducing the risk of specialization. A main reason for diversification is to be buffered from market fluctuations: a farmer can avoid dependence on the market price of one crop by selling a variety of agricultural products. Price supports remove the incentive to diversify and encourage farmers to plant more of the crops that are under subsidy. Coupled with disaster payments, tax advantages, and special laws, the programs have encouraged specialized grain farms, some of which are located in high risk areas or farmed with high risk methods. Because of the programs, the farmers have not had to bear the full costs of their use of resources in this manner. Thus, commodity programs in effect, have placed a negative incentive on soil conservation. In some cases, price support programs have even directly penalized soil-conserving farmers. In 1975, for example, Agricultural Stabilization and Conservation Service (ASCS) regulations encouraged some farmers to plow land that they had kept in grass under federal conservation programs. The ASCS refused to let farmers count their protected grasslands as normal crop acreages.

Still, for most of the past several decades, farmers have been paid to reduce the number of acres devoted to crops. While recent studies have concluded that the amount of erosion control achieved with past set aside programs is not nearly as much as could have been achieved if soil conservation had been the chief program goal,[2] the price support and attendent acreage division programs did achieve some soil erosion abatement. This, however, has been a by-product of the supply control programs and, is not, evidence of integration of conservation program goals. And, while price support programs may also reduce farmers income fluctuations, these commodity programs are essentially short-term with year to year adjustments. This is not conducive to longer term conservation goals.

Even the soil conservation programs owe their birth and growth to the fact that they have supported goals in addtion to soil conservation. The initial 1930s legislation, for example, provided a legal vehicle to provide payments for reducing acreage devoted to crops and provided increased employment opportunities in a depressed economy. Later soil conservation programs aided farmers in improving yields and provided financial incentives to remove surplus land from production.

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[2] W.G. Boggess and E.O. Heady "A Sector Analysis of Alternative Income Support and Soil Conservation Policies." American Journal of Agricultural Economics, 63(4): 618-628 (1981).

This lack of integration of conservation programs with other agricultural programs continues despite the passage (and completion of the first phase), of the Soil and Water Resources Conservation Act of 1977 (RCA). It was hoped that the RCA would achieve some integration of various programs so more conservation could be achieved. Yet, the recent experience with the Payment-In-Kind (PIK) program demonstrates that this integration has not occurred.

The PIK program has diverted 82 million acres from agricultural production. Given that most of the excess erosion (erosion greater than 5 tons per acre) occurs on relatively little of our tilled land, it would have been possible to achieve considerable (although short term) conservation at little additional cost if these diverted PIK acres were also the highly eroding acres. "Targeted diversion" was not part of the PIK program; nor were committees examining the whole base option farm bids allowed to select a higher bid for a contracted payment on a higher eroding farm over a lower bid but lower eroding farm.

Reasons For Program Conflicts

One can speculate has to why such program integration is lacking. First, there has been little political incentive or political levers to integrate resource policies with other farm legislation. The past soil conservation programs, while a relatively inefficient and ineffective method of reducing erosion, were politically popular because they frequently lowered farmers operating costs. The program benefits were popular and were widely spread, thus building a strong political constituency which supported preservation of program benefits in their historic distributional pattern.

Second, any gains from the depletion of soil--and in most cases it is is profitable to deplete the soil--are capitalized into the value of the cropland. These are property rights--the right to let ones land erode--and they are valuable. Farmers understandably resist attempts to remove these property rights and thereby devalue their property, at least unless there is compensation. USDA historically has been the farmer "spokesperson" and has not historically viewed their mission as that of devaluing farm property by reduction of property rights. Declining real budgets have limited consideration of the alternative of compensation for such actions.

Third, only recently has data been available to determine which land is eroding. Thus, it is only recently that policymakers have had data which highlighted the possibilities of achieving more conservation by concentrating expenditures and technical assistance on the more critically eroding acres.

Four, and perhaps most important, conservation of soil has historically not been deemed very important relative to other objectives. For most years there have been excess resources in farming with resultant overflowing silos; in this atmosophere, soil conservation was not perceived as an issue of urgency.

Interest in achieving more soil conservation has coincided with the 1970's interruption in chronic surplus conditions. With today's return to surplus conditions, one might reasonably ask if soil conservation is indeed a matter for current public concern.

A complete answer to this question depends on knowledge of the production impacts of soil erosion, as well as a reasonably accurate prediction of whether the future will be dominated by production surpluses or shortages. This knowledge is not available in as much detail as we would like.

Renewed interest in soil conservation also has coincided with the increased visibility of the environmental movement and the knowledge that agriculture is a chief contributor to water pollution. Here too there are knowledge gaps. Little is known about the short or long run impacts of herbicides, fungicides, insectcides, excess nutrients, or sediments on water bodies and the plants and animals that live around them. We do not even have conclusive evidence of the amount of these materials that are present in water bodies nor the amount that can be traced to agricultural production practices.

Thus, while new information does link soil erosion to reduced cropland productivity and water quality, there remains considerable uncertainty as to the exact nature and magnitude of these impacts. I tend to agree with those[3] who argue that in the absence of dependable knowledge of the future, we should be careful with our use of the soil resource, particularly since the consequences of being "wrong" is less devastating if we have made too many conservation investments than if we have make too few.

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[3] L.W. Libby "A Perspective that Strong Public Action is Needed

Toward Program Improvements

The 1977 National Resource Inventory (NRI) data provides some insights, as to possible policy choices in developing improved conservation programs. It and subsequent analyses reveal

- Seventy percent of the excessive erosion (greater than 5 tons per acre per year) is concentrated on less than 8.6 percent of our tilled cropland.
- There appears to be satisfactory amounts of cropland available to more than meet projected food demands without relying on the critically eroding acres.
- If the critically eroding acres were removed from production, considerable erosion control could be achieved at very low cost. Ogg *et al.*[4] estimate that a program targeted to these areas could reduce erosion 10 fold at less than

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to Deal with Problems of Soil Erosion" pp. 43-53. In L. Christensen *Perspectives on the Vulnerability of U.S. Agricultural to Soil Erosion: An Organized Symposium*. NRE Staff Report No. AGES830315. NRED/USDA March 1983.

[4] Ogg, C.W., A. B. Miller and K.C. Clayton. "Agricultural Program Integration to Achieve Soil Conservation" Unpublished draft ERS/USDA 1983.

10 percent of the current federal outlay per ton of soil saved.

This suggests to me that soil erosion is not endangering our future food supply--at least not in any crisis proportions. However, for very low cost, we can significantly reduce erosion and probably significantly improve the nation's water quality.

While there is still much yet to know, we now have, a "revolution" in our knowledge concerning resource conditions, past program effectiveness and program conflicts in achieving resource goals, compared to what was available before 1977. What we have learned to date suggests that some appropriate soil conservation strategies to investigate further include:

- Providing benefits from various federal loan and commodity program contingent on farmers practicing effective soil conservation.
- Targeting public conservation investments (cost-sharing, education, and technical assistance) to the lands that will yield the highest returns in terms of in on-farm productivity and off-farm environmental quality improvements.
- Designing any future supply control programs so that they include the retirement of the more seriously erosive acres in periods of surplus harvests.
- Developing a long-term reserve of the more critically eroding acres.

Making the receipt of benefits of various federal programs contingent on farmers' conservation behavior is frequently termed "cross-compliance." Landowners either recieve no or lower agricultural program benefits if they do not meet conservation standards. Alternatively, a cross-compliance strategy may be designed so that farmers receive higher program benefits if they conserve to soil loss standards. These types of programs are most effective when the farmers whose lands have erosion problems are also those receiving deficiency or price support payments, acreage diversion payments, or are participating in loan programs. Participation in commodity programs, for example, is not evenly spread across the nation. Thus cross-compliance linked to commodity programs would have considerably more impact in some states than in others. Texas, for example, has much of its acreage in corn and cotton, both of which have strong commodity programs. Similarly, Iowa has many corn farmers who elect to participate in commodity programs. West Tennessee, like many other regions in the upper Mississippi Valley, on the other hand, has a substantial amount of land in soybeans, for which few commodity programs exist. Hence, cross-compliance strategies tied to existing commodity programs will favor Texas and Iowa over Tennessee and other upper Mississippi Valley states.[5]

Furthermore, if small farms are more likely to be comprised of erosive lands, as the evidence suggests, these small farm owners will have higher costs to meet soil loss standards then will larger, less erosive farms. This and the apparent relation that older, more financial secure farmers own less erosive lands, have lead some researchers to tentatively conclude that cross compliance programs will provide greater incentives to those who need the incentives least--the older more secure operators managing the larger less erosive farms.[6]

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[5] K. Clayton and C. Ogg, "Soil Conservation Under More Integrated Farm Programs" unpublished Paper, Washington, D.C. USDA, 1982.

I recently participated in research that suggests that these concerns, while valid, are not insurmountable and that cross-compliance is a potential conservation strategy that deserves more examination.[7] This research was a case-study of a hypothetical cross-compliance program for farmers in the North Fork of the Forked Deer Watershed (NFFD) in Gibson County, West Tennessee--an area which has some of the most serious erosion and associated water quality problems in the nation. The NFFD is predominately a soybean producing area, and thus farmers participate in fewer commodity programs than if they were producing corn or cotton. In this case study of the NFFD, a representative sample of farmers were surveyed (directly and through agency records) to determine their past 5 years of participation in ASCS deficiency, diversion and disaster payments programs, Commodity Credit Corporation (CCC) non-recourse and recourse loan programs, Farmers Home Administration (FmHA) loans, Small Business Administration (SBA) loans, and Federal Crop Insurance Corporation (FCIC) insurance programs. This information was compared with the least cost methods of achieving soil loss limits on each farm field in an effort to determine if a cross-compliance program would be effective. That is, were the benefits obtained from farm program participation greater than the costs of adopting conservation practices? If not, there would be no incentive for farmers to voluntarily cross-comply in order to obtain other program benefits.

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[6] D.E. Ervin, W.D. Hefferman, G.P. Green. "More On Cross-Compliance for Soil Conservation." Paper presented at Southern Agricultural Economics Association Annual Meetings, February 8, 1983.

[7] A.R. Grumbach "Cross Compliance as a Soil Conservation Strategy: A Case Study of the North Fork of the Forked Deer River Basin in Western Tennessee" Unpublished, M.S. Thesis. Department of Agricultural Economics. Virginia Polytechnic Institute and State University, May 1983.

The results were sensitive to the level of soil control desired and the availability of cost-sharing. If the surveyed NFFD farmers received cost-sharing equivalent to the current cost-sharing rates for conservation practices, there were positive average benefits (net of conservation costs) of cross-complying to met a 5 ton per acre per year soil loss limit. Over 50 percent of the fields presently exceeding 5 tons per acre per year were managed by farmers who had a positive incentive to bring their fields into compliance. The 5 ton limit, if imposed in a cross-compliance strategy should induce enough voluntary participation, if used in conjunction with cost sharing, to reduce average watershed erosion rates from 14.7 tons per acre per year to 5.9 tons per acre per year. The percentage of compliance rises to 95.8 percent of fields when the soil loss limit is set at 20 tons per acre.

This study suggests that cross-compliance programs may be feasible if targeted at some of the higher eroding fields--a program perhaps should be designed so that greater per acre incentives are provided for the more erosive lands. Also, if more than just commodity programs are included, farmers--even in regions such as West Tennessee--may have incentives to comply. This assumes that farmers would have to comply to have access to future as well as present farm and loan program benefits. Such a requirement would preclude farmers from abandoning conservation practices in years of high crop prices.

Although further study is needed, it appears that a voluntary cross-compliance strategy has potential and is certainly worthy of some further investigation. This case study did not examine administrative and enforcement costs of such an approach, and these would need further examination. Even if cross-compliance strategies are not as cost-effective as alternative strategies, they have the advantage of minimizing the number of instances when agricultural policies work at cross purposes to one another.

The targeting of public conservation investments to the areas that will yield the highest returns in terms of improvements in on-site and off-farm benefits requires knowledge of the linkages of soil erosion to these impacts. But, the lack of precise details of these linkages does not preclude reallocations of funds and conservation investments as best can be achieved with the available information.

For example, conservation tillage can be profitable and can reduce erosion rates in certain regions if used properly. While it may also require increased chemical usage and perhaps result in reduced water quality, it still has much to recommend it as a strategy of choice. Yet ASCS data shows that conservation tillage appears to be used mainly on less erosive lands.

Furthermore, current case-study research by Dr. Peter Novak of Iowa State University[8] has found that conservation tillage is frequently being used in a manner that belies its name. That is, some farmers are not leaving enough residue after harvest and during field preparation to obtain improvement in erosion rates. Although the farmers are referring to their practices as conservation tillage because of the machinery they are using, only 22 percent of the surveyed corn farmers and 25 percent of the surveyed soybean farmers were achieving the possible erosion control they should be. The majority of farmers were not using conservation tillage in such a manner as to capture all the financial benefits possibile. As a result some were blaming the conservation tillage technique--and not the management of the technique---for poor profits and therefore planned to abandon its use. Here is a role for conservation programs--to get conservation tillage used properly on the more erosive lands and in such a way as to reduce deleterious environmental impacts and to capture financial benefits.

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[8] P.J. Nowak, Department of Sociology and Anthropology, Ames, Iowa. Personal Communication. June 20, 1983.

Similarly other public conservation investments, through cost-sharing, education, and technical assistance, can be targeted to both productive (but shallow) top soils and regions with severe agricultural related water pollution problems. Variable cost sharing payments could be established so that more cost-sharing of practices would be available to farmers whose lands are the more erosive. This targeting approach is a break with past program investment distributions. According to USDA data, less than 19 percent of the soil conservation practices cost-shared by ASCS have been placed on the most erosive lands, and over one half were placed on lands eroding at less than 5 tons per acre per year.

A low-cost method of achieving conservation is that of targeting any acreage diversion programs so as to obtain as much soil erosion control as possible when croplands are removed from production in times of surplus. If this is coupled with the long-term removal from production of the most critically eroding acres, considerable reductions in erosion could be obtained at low cost relative to past program expenditures. This might be achieved by the federal government renting the acres in question through long-term leasing arrangement and redirecting Agricultural Conservation Program (ACP) payments for cover crops to these areas. Ogg reports that a similarily designed 1960 Conservation program included about 28 million acres, well over twice the area needed to protect all critically eroding acres in the

U.S.[9]

Conclusion:

It is clear that agricultural legislation is currently undergoing considerable scrutiny--the existence of these hearings is one example of the interest to improve our federal farm programs. This is, in part, recognition that the Payment-in-Kind (PIK) program was a "patch" placed on an agricultural sector that was generating too many bushels and not enough income. As we revise our programs, it will not always be possible to have conservation goals mesh harmoniously with other goals such as improved farm income, improved balance of trade, stabilization of prices, reduction of government expenditures, low food prices to customers, use of food as a political weapon, or the maintenance of a competitive position in world trade. After all, many of these goals are in conflict. Nevertheless, there is information available which suggests various cost-effective methods of achieving conservation mainly through targeting and program integration.

There is need to improve on this information with research on the links between erosion and productivity, future yields, water quality, and air quality. Research should also ascertain the factors influencing adoption of conservation practices and to reduce any barriars. Also important is the determination and possible mitigation of any adverse impacts of implementing alternative conservative strategies. Although there are numerous policy and technical questions yet to be answered, what has been learned to date can serve as a catalyst for improving soil conservation programs.

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[9] C. Ogg "Soil Conservation Under More Integration of Farm Programs" Unpublished Paper ERS/USDA Jan. 25, 1982.

Some of these possible strategies discussed here have been encompassed, in part, in recent USDA agency planning. In December of 1982, the Secretary of Agriculture presented to Congress a final Program Report and Environmental Impact Statement in response to the provisions of RCA. As part of the final report, the Secretary expressed his intent to redirect USDA activities to target 25 percent of Soil Conservation Service (SCS) and ASCS technical and financial assistance and to consider matching state and local funds by awarding grants to those soil conservation districts experiencing severe erosion problems. The report also details the intent of USDA to request conservation plans from farmers applying for some Farmers Home Administration loans, to emphasize conservation tillage, to resolve inconsistencies in various agency programs, to increase the use of long-term agreements with farmers, and to set up pilot projects to test new approaches for dealing with soil erosion problems. Thus it appears that there will be some redirection of current programs to yield more soil retention or improved water quality per conservation dollar spent.

There is more that can be achieved if the political constraints can be overcome. I mention this because there are few ideas, if any, in my testimony that have not already been examined, at least to some extent, by USDA personnel. The data needed for analyses is mainly USDA data. Yet opposition to more cost-effective strategies, targeting of funds, better program integration also has come from within USDA, as well as from outside sources.

Recent polls reflect broad public awareness of soil erosion and a willingness to support conservation efforts. And while many, perhaps most, farmers perceive themselves to be stewards of the land, there is still a large discrepancy between attitudes and behavior.[18] The challenge is to translate the strong societal desires to avoid scarcity and to maintain a quality environmental into laws and other institutional changes that will motivate the farmer of croplands to conserve our nation's soil when and where it seems appropriate.

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[18] T.L. Napier and D.L. Forster "Farm Attitudes and Behavior Associted with Soil Erosion Control" In H.G. Halcrow, E.O. Heady, and M.L. Cotner (eds) Soil Conservation Policies Institutions and Incentives Ankeny, Iowa: Soil Conservation Society of America, 1982.

Senator **Jepsen**. Thank you, Ms. Batie.

Linda K. Lee, welcome, and please proceed as you wish.

STATEMENT OF LINDA K. LEE, ASSISTANT PROFESSOR, DEPARTMENT OF AGRICULTURAL ECONOMICS, OKLAHOMA STATE UNIVERSITY, STILLWATER, OKLA.

Ms. **Lee**. Thank you, Mr. Chairman. I appreciate the opportunity to testify today.

Although soil erosion rates increased in the last decade, wide variations in soil loss exist within and among regions of the United States. These differences in soil loss result from variations in land quality and adoption of soil convervation technology.

Senator **Jepsen**. Excuse me. Would you please bring the microphone slightly closer?

Ms. **Lee**. Is that better?

Senator Jepsen. Better.

Ms. **Lee**. Thank you. Land ownership characteristics such as farm size are among the factors thought to influence the adoption of soil conservation measures. Differences in adoption rates among land ownership groups have implications for public policy designed to encourage soil conservation and reduce soil loss. Analysis of conservation adoption patterns suggests that one of the most important land ownership factors inhibiting the adoption of conservation technology is small operating size. Much of our current and proposed soil conservation policy would not always be effective in reaching the small farms, a group with low conservation adoption rates and, in some cases, serious soil erosion problems.

A review of studies reveals that many factors have been proposed to be important in the adoption of soil conservation technology. Economic profitability over time has been cited by economists as the chief determinant of conservation adoption. Within the profit maximization framework, personal characteristics of the owner and operator such as age and education, and ownership or structural characteristics of the farm firm, including farm size, can influence the decisionmaking process.

An analysis of past studies and recent national data from the Soil Conservation Service National Resource Inventories and the USDA Landownership Survey, suggests that one of the most important factors influencing the adoption of conservation technology is small operating size. Our study of conservation tillage and residue management adoption across the United States indicated that these practices are adopted by 40 percent of the smallest farmers and about 61 percent of the largest farms.

Other studies of conservation investments, such as terraces, suggests the same type of pattern. One reason may be that small farm size is associated with low volume production, increased per unit costs, and low net farm income, which makes it difficult to invest in conservation structures or equipment. Other factors are undoubtedly important in the adoption process, including age, education, and in some cases, the tenure status of the owner or operator. However, the evidence about these factors is not as conclusive as of yet. We need to further explore the relative influence of other factors that influence attitudes toward the economic feasibility of conservation adoption. However, small size of farm has been found to have a negative impact on the adoption of all types of conservation technologies.

Soil loss is determined by physical factors in addition to adoption of technology. Some national data indicate that erosion-prone cropland or land that is susceptible to erosion is distributed among varying farm size groups in approximately the same proportion as their holdings of total cropland. In other words, this data would indicate that poor quality land is not concentrated by farm size. However, this trend may vary with in regions or within particular localities.

Combining all the information that we now have, it would appear that a group that is likely to experience soil erosion problems over time will be small farms who do own erosion-prone lands. There are several reasons for this. First, the evidence indicates that they tend to have a lower level of adoption practices such as conservation tillage. Second, like other farmers, they tend to adopt those practices that they do put in place on their better lands. And over time, a combination of these factors makes this group a high risk for excessive soil losses.

The evidence seems to suggest that this is the case. National data indicates that farms of less than 140 acres control approximately 20 percent of out total cropland and approximately the same proportion of erosion-prone cropland, subclass E. However, in terms of soil losses, they control 24 percent of all cropland with soil losses greater than 5 tons per acre, which is generally considered to be a safe level of erosion. They control 27 percent of all cropland with erosion in excess of 20 tons per acre, which is considered to be severe.

There are several points that I should make here. First of all, all farm size classes have the potential for erosion problems. Medium and larger size farms, in fact, control almost 80 percent of the erosion-prone land. They tend to have higher rates of conservation technology adoption, but not all members of these groups adopt. Small farms with erosive lands have as a group a high potential for soil erosion problems which could probably be attributed to a lack of access to financial resources.

A review of much of our current and proposed soil conservation policy suggests that our programs may not always be effective in reaching this group. There have been various types of soil conservation policy alternatives proposed or implemented. These include cross compliance with commodity or other Federal programs, subsidy and other cost share incentive schemes, and tax penalties and regulation. I would like to briefly discuss each of these.

Cross compliance would require preformance of conservation activities as a condition for eligibility for other Federal programs. The programs that have been most often discussed are price support or other acreage diversion programs. For this program to be successful, farmers whose lands have serious erosion problems would have to participate. However, historically, the rate of participation in ASCS commodity programs has been higher among eligible larger farms than among smaller ones. Among producers of commodities covererd by ASCS programs, smaller farms with erosive land are less likely to be reached by cross compliance than larger farms with and without erosion problems.

In States where commodity programs have traditionally had a limited importance, or among producers of commodities such as soybeans that have been excluded, at least in part from commodity programs, even larger farms would not be reached by cross compliance programs.

The enactment of PIK raises some further questions about the impact on soil conservation. Traditionally, soil erosion rates have declined during eras of surplus periods. If the PIK program and other acreage diversion programs succeed in diverting erosive land from production, then soil erosion problems may be moderated, at least temporarily. However, if the rate of participation in these programs is lower among small farms, then soil loss problems could continue on these smaller farms, depending upon the market conditions that they respond to.

Voluntary incentive programs including direct subsidies and cost share programs have been a major part of past programs dealing with soil conservation. An ASCS evaluation of the agricultural conservation program, a major cost share program, found that small farms benfit from conservation cost share assistance in proportion to their numbers, but more than proportionately to their share of land area. Farms of less than 300 acres receive 65 percent of the study practices, but control some 17 percent of the farm acreage. Unfortunately, this type of targeting, as has been mentioned earlier today, has been ineffective as most practices have been installed on land without a serious erosion problems. Targeting of cost share assistance to small farms perhaps could be an appropriate strategy. These small farms do have some erosion problems. However, the payoffs of this type of programs need to be evaluated. The same amount of funding may result in a greater conservation effort if spent on erosive land held in larger units if, indeed, larger farms are more likely to adopt soil conervation measures. However, any effective program in this area will have to target assistance to lands that are potentially more erosive.

The taxes and regulation policies that have been proposed are likely to fall harder on farmers with small holdings who have erosive land. These farms have the least resources to either adopt or to pay penalties. These types of programs would appear to penalize smaller farms with erosion problems unless positive incentives are included.

In conclusion, I would like to make the point that not all erosion is concentrated on small farms. For midsize or larger farms who are eligible to participate in commodity programs, cross compliance may be an effective tool to promote soil conservation goals.

However, for the approximately 25 percent of our erosive croplands that are controlled by small farms, cross compliance would be of limited effectiveness unless special incentives are developed to insure small farm participation or unless the cross compliance programs are broadened to extend beyond commodity programs.

Cost share programs have been targeted to small operations in the past, perhaps inadvertently. The effectiveness of these types of programs has been limited, however. We need to target these programs to our most erosive land. If we are successful, this program could reach a group that is outside the scope of traditional commodity cross compliance programs.

Since larger farms control a larger portion of our erosive lands than small ones, we do need study to determine the most effective distribution of our conservation dollars among groups.

I would like to conclude by saying that the national overview statistics that I have presented today, I think, are useful. But we should recognize that national statistics can obscure problems that vary within localities and within regions. Soil conservation problems vary from region to region with the nature of the physical erosion hazard, the type of crop that is grown, the average size of farm, and many, many other factors. Any soil conservation policy should be flexible enough to accommodate great diversity in the nature of the problem as well as in the appropriate solutions. Thank you.

[The prepared statement of Ms. Lee follows:]

PREPARED STATEMENT OF LINDA K. LEE

ADOPTION OF SOIL CONSERVATION:

IMPLICATIONS FOR SOIL CONSERVATION POLICY

Increased soil erosion rates in the 1970s have been largely attributed to increased export demands and the expansion of agricultural production to marginal, more erosive acres. Although overall soil erosion rates increased, wide variations in soil loss exist among and within regions. These differences in soil loss result from variations of land quality and adoption of soil conservation technology. Landownership factors, such as farm size, are among the factors thought to influence the adoption of soil conservation measures. Differences in adoption rates among landownership groups have implications for public policy designed to encourage soil conservation and reduce soil loss. Analysis of conservation adoption among landownership groups suggests that many proposed soil conservation policy alternatives would not always be effective in reaching groups with the lowest conservation adoption rates and most severe soil erosion problems.

Adoption of Soil Conservation Technology

A review of the numerous studies that explore determinants of soil conservation adoption reveals that many factors have been proposed to be important in the adoption process. Economic profitability over time has been cited most by economists as the chief determinant of conservation adoption. However, within the profit maximizing framework, personal characteristics of the owner or operator such as age and education, and ownership or structural characteristics of the farm firm, including size and tenure arrangements, have been hypothesized to influence the decision-making process and the adoption of soil conservation measures. Unfortunately, review of these studies does not provide a ranking of the relative importance of the various factors which can impede soil conservation adoption. Nor do many of these studies consider the differences between soil conservation investments such as terraces and practices such as conservation tillage.

After analyzing past studies and recent data from a merger of the 1977 National Resource Inventories (NRI) and 1978 USDA Landownership Survey, I conclude that one of the most important factors impeding the adoption of all types of conservation technology, investments as well as practices, is small operating size. Our analysis of merged data from the USDA surveys indicated that small farm size inhibited adoption of minimum tillage across all regions of the country, all types of land tenure arrangements, and land quality designations. Nationally, only 40% of small farms (less than 141 acres) compared to 47% of medium-sized farms (141-700 acres), and 61% of larger farms (over 700 acres) use minimum tillage on cultivated cropland (Lee and Stewart).

Other studies of conservation investments, such as terraces or grassed waterways, have reported similar results. Studies in the Corn Belt and elsewhere by Haren, Frey, and Fisher and Timmons, indicated that small farm size was an inhibiting factor in soil erosion control. The North Central Farm Management and Land Tenure Research Committee listed organization problems on small farms as one of several major obstacles to soil conservation investments.

One explanation is that small farm size is often associated with low volume production, increased per unit costs, and low net farm income (Miller, Rodewald, McElroy). Low net farm income makes it difficult to invest in structures or equipment for soil conservation measures. In the case of conservation tillage, large farm size may create more incentives to substitute herbicides for labor and thus encourage more conservation tillage adoption among larger farms. Thus, a combination of economic conditions may make it more difficult for farmers with small acreages to invest in and adopt conservation technology.

This is not to say that other factors such as age, education, or tenure arrangements do not play a role in conservation adoption. However, the evidence about their relative impact is not as clear or consistent as the evidence regarding farm size. For example, higher soil erosion losses have often been attributed to a changing structure of agriculture that has separated ownership from farm operation on many U.S. farms. Recent evidence suggests that while land tenure and leasing problems may impede the adoption of some types of conservation structures, such as terraces, separation of ownership from farm operation does not inhibit adoption of conservation tillage, a practice often undertaken at the iniative of the operator (Lee and Stewart). Nor do soil loss rates appear to significantly differ among full-owner operators, landlords, nonfamily corporations, and family ownerships at the national level (Lee).

We need to further explore the relative influence of other factors which influence attitudes toward and the economic feasibility of conservation adoption. To date, however, the evidence indicates that small size of farm has a negative impact on the adoption of all types of conservation technologies.

Soil loss is determined by physical factors in addition to conservation technology adoption. Studies of adoption have often been clouded by the difficulty of determining the distribution of land quality among adopters. The best available data, the merged 1977 NRI and 1978 Landownership Survey, indicate that on a national level, erosion-prone cropland is distributed among varying sizes of landownership units in the same general proportion as sizes of cropland holdings (table 1). Erosion-prone land may be concentrated among smaller or larger farm units in a given locality, but for the nation as a whole, no such general trend is apparent.[1]

Combining all information, it would seem that those most likely to experience soil erosion problems over time, will be small farms with erosion-prone lands. This group has a lower level of adoption of soil conserving practices than medium or larger farms. Further, our work with minimum tillage adoption suggests that their behavior is similar to other farmers in that they tend to concentrate those

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[1] There is some evidence that a slight concentration of erosion-prone land exists among very low net farm income groups. However, size of farm and net farm income, while correlated are not identical measures as small farm size for some commodities may result in relatively high net farm income.

Table I. U.S. Cropland Distribution by Size of Landholdings, Degree of Erosion, and Land Quality.

Size of Landholdings[1]	Tons/Acre/Year Soil Loss 0-2	>2-5	>5-10	>10-20	>20-30	>30	Erosion-prone Cropland[2]	Total Cropland
	Percent of landholdings							
Less than 140 acres	17.89	19.05	23.50	23.12	27.41	27.71	19.19	19.62
140 - 999	55.93	62.63	60.64	63.89	63.16	62.25	59.07	59.11
Over 1,000	26.17	18.32	15.86	12.99	9.43	10.06	21.74	21.77
Total[3]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

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[1] Holdings are reported on a county basis.

[2] Erosion-prone cropland was defined as capability classes IIe, IIIe, IVe, and VIe.

[3] May not total to 100 because of rounding.

Source: 1977 National Resource Inventories (SCS, USDA) and 1978 Landownership Survey (Econ. Stat. Coop. Serv., USDA).

practices that they do adopt on better land. These factors combined make this group a high risk for excessive soil losses over time.

Analysis of the distribution of soil losses by farm size reported in table 1 suggests that, at the national level, this is indeed the case. Farms of less than 140 acres control approximately 20 percent of total cropland, 19 percent of erosion-prone cropland, but approximately 24 percent of all cropland with soil losses in excess of 5 tons/acre/year. As soil losses increase, the percentage of cropland owned by small farms increases, to the point where farms of less than 140 acres control almost 27 percent of cropland with erosion in excess of 20 tons/acre/year.

Two caveats are necessary. First, almost 77% of all cropland has 5 tons/acre soil loss or less. This is the generally accepted tolerable level of soil loss. Only 23 percent of all cropland has soil loss rates that are considered excessive. Second, all size classes have the potential for erosion problems as erosive land is also held in medium and larger landholdings. Although they have higher adoption rates than smaller size farms, not all medium and larger size farms do adopt. Furthermore, they control almost 80% of our most erosion-prone cropland. Small farms with erosive land have as a group, however, a high potential for soil erosion problems, which can probably be attributed to a lack of access to financial resources. A review of much of our current and proposed soil conservation policy suggests that our programs may not always be effective in reaching this group.

Soil Conservation Policy Alternatives

Several basic types of policies have been proposed or implemented to reduce excessive soil losses. These include cross-compliance with commodity or other federal programs, subsidy and cost-share incentive schemes, tax penalties, and regulation.

Cross-compliance, requiring performance of conservation activities as a condition for eligibility for other federal programs, has been a controversial policy proposal. Most discussions have focused on linking participation in either price support or acreage diversion programs to soil conservation activities. For this type of program to be effective, farmers whose lands have serious erosion problems would have to participate. However, historically, the rate of participation in ASCS programs has been higher among eligible larger farms than among smaller ones (Lin, Johnson, Calvin, p. 14). Dinehart and Libby concluded that cross-compliance will affect participating larger farms, who benefit most from ASCS support programs, more than smaller farms. Most benefits from ASCS programs have gone to large farms since payments have been based on the volume of production (Lin, Johnson, Calvin). It should be noted, however, that many large farms as well as small farms would not be affected by cross-compliance because they produce commodities outside the scope of normal programs.

The evidence suggests, then, that among producers of commodities covered by ASCS programs, smaller farmers with lower conservation adoption rates who also farm erosive land are less likely to be reached by cross-compliance strategies than larger farms with and without erosion problems. In states where commodity programs traditionally have had limited importance, or among producers of erosive rowcrops such as soybeans, usually excluded from commodity programs, even larger farms with erosion problems would not be reached.

The enactment of the PIK program raises some questions about the impact of this acreage diversion program on soil conservation decisions. Historically, soil erosion rates have declined during surplus eras as marginal lands have rotated out of production. If the PIK programs and acreage diversion proposals succeed in diverting erosive lands from intensive production, then soil erosion problems may be, temporarily at least, moderated. If however, PIK programs like other commodity programs, have a higher rate of participation among larger farms than smaller farms, it remains to be seen what will happen to erosion problems on nonparticipating small farms. If these small farm operators expand production in response to market conditions, soil loss problems among this group could continue or even intensify.

Voluntary incentive programs, such as direct subsidies and cost-share programs have been a major part of past conservation programs. An evaluation of the Agricultural Conservation Program (ACP) found small farms benefit from cost-share assistance in proportion to their numbers, but more than proportionately to their share of total land area (National Summary Evaluation of the Agricultural Conservation Program). Farms of 300 acres or less received nearly 65 percent of all cost-shared practices sampled during the 1975-78 study period, but during that time controlled only about

17 percent of total farm acreage. Despite this targeting of assistance to small farms, the erosion control impacts of the ACP efforts have often been reduced because most cost-sharing has occurred on land with few erosion problems. The evaluation found that more than 52 percent of the sampled conservation practices were installed on land eroding at less than 5 tons per acre annually. These lands comprise 87 percent of the land in farms, but have only minor erosion problems.

Since the evidence suggests that although erosive land is not concentrated among small farms, they tend to have lower rates of conservation adoption, some targeting of funds to small farms may be appropriate. Further study, however, is needed to determine the pay-offs from this strategy. The same amount of funding may result in greater conservation effort if spent on erosive land in larger ownership units than if spent on erosive land in small farms, if larger farms are more likely to adopt soil conservation measures. Certainly, a larger percentage of erosive land is controlled by medium size and larger farms. However, given that all farmers tend to cost-share and adopt conservation technology on better land, an effective subsidy program will have to target assistance to lands that are potentially more erosive.

Another related conservation strategy that has been proposed is to penalize via taxes those who do not adopt conservation strategies or meet an acceptable level of soil loss. Adoption of conservation technology is much more readily observed and perhaps enforceable than soil loss limits, although states such as Iowa have proposed regulation based on acceptable levels of soil loss. Tax penalties would most likely fall hardest on farmers with small holdings who operate more erosive land, those with the least resources to either adopt conservation technology or pay tax penalties. This would appear to be an approach that would penalize instead of ignore small farms with erosion problems.

A fourth alternative strategy is regulation to achieve acceptable levels of soil loss. The regulatory approach is currently being explored in Iowa where if recommended T-values are not achieved, soil conservation districts are empowered to require owners to adopt soil conservation measures. As with other policies, smaller farms with erosive land are potential targets for regulation. Regulation may be more effective if financial assistance is combined with a regulatory standard.

Conclusions

Not all erosion is concentrated among smaller farms; in fact, most erosive lands in terms of acreage are controlled by mid-size and larger owners. For the mid-size and larger farms who are eligible to participate in commodity programs, cross-compliance may be an effective tool to encourage conservation activities. For the 20 percent of erosive croplands controlled by small farms, cross-compliance is likely to be of limited effectiveness unless special incentives to encourage participation are developed.

Cost-share policies have been, unintentionally perhaps, targeted in the past to smaller operations. Again, effectiveness was limited because practices were installed on better land. If cost-sharing can be targeted more selectively to erosive land on smaller farms, it could reach a group outside the scope of many cross-compliance programs. At the same time, it must be recognized that larger farms do have erosion problems as well, and in terms of the acreage involved, represent a larger proportion of erosive lands than do smaller farms. Some study to determine the most effective distribution of dollars among groups appears necessary. Tax penalties and regulation are probably less desirable policy alternatives to reach erosion problems on smaller farms because of the penalties attached.

Although the analysis has focused on a national overview of soil conservation issues, it must be recognized that national statistics can obscure varying problems within localities. Applicability of conservation practices varies from region to region, as do physical erosion problems, crops, average size of farm, and tenure arrangements. Any soil conservation policy should be flexible enough to accomodate great diversity in the nature of the problem as well as in the appropriate solutions.

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Senator JEPSEN. Thank you, Ms. Lee. Pierre Crosson, you may proceed.

STATEMENT OF PIERRE CROSSON, SENIOR FELLOW, RESOURCES FOR THE FUTURE, WASHINGTON, D.C.

Mr. CROSSON. Thank you, Mr. Chairman. I welcome the opportunity to appear before the committee today to talk about some issues of soil conservation policy. Let me say at the outset that it seems to me that the key issue that we ought to be addressing is asking the question—what is soil erosion costing us as a Nation, both in terms of increased cost of production of food and fiber, that is to say, the effect of losses of productivity on the farm, but also that we not overlook the costs of erosion when the soil leaves the farm, the so-called off-farm damages in terms of accelerated siltation of reservoirs, pollution of rivers and streams and harbors may, in fact, be as important as the effects of erosion on lost productivity.

So we need to keep both of these kinds of costs in mind.

Let me also say that it seems to me that as an overarching policy objective, with respect to agriculture and the way we manage our agricultural resources, we ought to aim at meeting future demands for food and fiber without incurring increasing real costs of production. That is to say, as a society, I think we owe it to ourselves and we owe it to future generations to undertake to manage our affairs so that we meet that objective

Now this essentially is the objective that soil conservationists always have had in mind. It's the underlying notion for the concept of "t" values; that is to say, that we should preserve the soil in such a way that we don't suffer long-term losses of productivity, because otherwise, we impose higher costs of production on future generations.

I endorse that essentially ethical concept.

Now, one's sense of urgency about erosion and soil conservation issues, it follows, I think, depends on one's judgment of whether the present and future costs of erosion, both kinds of costs, are likely to be high or low. In this connection, let me say that if agriculture continues to be characterized by surplus, as we have been for the last year or two, then it seems to me that in the natural course of events, as one of the consequences of surplus is that land now, some of this erosive land that has been pointed to that is now in grains and in soybeans, in particular, will go out of production, that we can look to see the erosion problem become less serious.

On the other hand, if the present situation turns out to be temporary, if there is a renewal of growth in demand, particularly export demand for grains and soybeans over the long-term future, I think it's quite likely that the amount—well, the implication of that is that the present condition of surplus would not be permanent, that at least in an episodic way over the longer term, we would find ourselves in situations where the demand for crops exceeds our ability to produce crops at constant costs. More land will be brought into production and the erosion problem and its consequences for costs could be more serious.

My point here is that one's judgment about the severity of the problem and the urgency of policies to deal with it depends very much about what one thinks about the longer term future for American agriculture.

My own belief is that over the next several decades, assuming the world economy recovers at a rate of growth comparable to that in the 1970's, that the combination of rising income and population, particularly in the developing countries, will lead to a renewal of growth in demand for exports and that, depending on the pace of technological change, this could well result in a significant increase in the amount of land and crops and a significant increase in the amount of erosion.

Let me say also that it seems to me that it's essential in thinking about erosion control policies that we distinguish sharply between the productivity effects, the so-called on-farm effects of erosion, and the off-farm effects, the damages to water quality, siltation of reservoirs, and so on.

There are several reasons for that. In the first place, they obviously aren't the same. And moreover, the lands where the one kind of problem is important may not necessarily be the same land where the other kind of problem is important. That is to say, you can have high rates of erosion on some land with very small effect on productivity, but perhaps serious off-farm damages or, contrarywise, you can have land, soils that are shallow over hard pan or consolidated material where a low rate of erosion might exact high costs in productivity, but not be very important from the standpoint of off-farm damages.

So that distinction, it seems to me, is essential for that reason. But in addition, the way things stand in the United States at the present time, it's much easier to make a case for direct intervention to require farmers to reduce erosion to avoid those off-farm damages than it is to require them to reduce erosion to protect productivity. The nature of the system of property rights in this country, the latter kind of action by Government is not acceptable. But our tradition and our laws do permit us, in principle at least, to require that polluters pay for pollution when somebody else bears the cost.

We do that with respect to industry, with municipalities, with respect to sewage discharges and so on. In principle, at least, it seems to me that the argument is equally strong with respect to agriculture to reduce those off-farm damages. That's another reason for keeping the two kinds of costs or the two kinds of damages separate.

Well, what do we know about these two kinds of costs of erosion? Sandra Batie has indicated, and everyone who has looked at this very closely knows, that the fact is we don't know very much. And indeed, it wasn't until the 1977 National Resources Inventory that we were able to really say much at all in a quantitative way about the effects of erosion on productivity.

Since the 1977 NRI data have become available, there are some studies that have been undertaken that do give some clues about the quantitative importance of the productivity losses because of erosion, cropland erosion in particular is what I'm talking about.

Some work we did at RFF, at Resources for the Future, indicated that in the period from 1950 to 1980, erosion on land in corn and in soybeans, in the corn belt and in the northern plains, had a significant, but small, effect in reducing yields. These estimates show that in 1980, corn and soybean yields in those areas were perhaps 3 to 5 percent less than they would have been otherwise. Of course, in 1980, they were a lot higher than they were in 1950 because of the impact of technology, but they were less than they would have been otherwise by anywhere from 3 to 5 percent because of the effect of erosion on the productivity of the land.

Some other studies also using 1977 NRI data have asked a different kind of question. They have said, if 1977 rates of erosion persist over varying periods of time, 50 and 100 years of those that have been used, what would be the effect on yields at the end of that period?

One study was done by a soil scientist at the University of Minnesota indicating that if 1977 rates of erosion continued over a 100-year period, that at the end of that time, corn yields would be lower by on the order of 5 to 10 percent from what they otherwise would be. Now that's a national average and the study shows that there are some areas in the corn belt in the Mississippi Delta, particularly on the more sloping lands, that the effect of continued current rates of erosion would be substantially higher than 5 to 10 percent. And clearly, in some places, in the Palouse region of the Northwest, wheat yields would be reduced by more than 5 to 10 percent by continuation of 1977 rates of erosion. But these national averages, nonetheless, it seems to me, are significant.

And, as I say, they suggest that those rates of erosion, if continued over long periods of time, would have a relatively small effect in reducing productivity of the soil and consequently, on cost of production.

Little as we know about the effects of erosion on productivity, we know even less about these off-farm damages. There is currently a study being conducted at the Conservation Foundation to try to get a grip on this issue to make some estimates of these costs. The main thing that they have found out, that there just isn't very satisfactory information about off-farm damages of erosion.

As far as they go, those estimates suggest to me—that is to say, the work done at the Conservation Foundation—that erosion from agricultural land in the United States at the present time is costing us maybe $1 to $2 billion a year in current prices. Now this is a very rough estimate, to be sure. Again, though, it suggests to me that that cost—if you compare the cost of those off-farm damages with the total costs of water-using activities in the United States, for recreation, for transportation, and so on, that the off-farm costs of erosion are relatively low.

Now, if, as I anticipate, the demand for crops increases rather substantially over the next several decades, then it follows, and the work that we have done at RFF indicates, that we could anticipate a substantial increase in erosion. In that case, I would expect the damages to productivity would rise from what they seem to be at the present time, and probably proportionately more than the increase in erosion because, as Neil Sampson has pointed out, as erosion proceeds, the damage to productivity is probably more than proportional to the increase in erosion.

The off-farm damages of erosion, according to the work that we have done at Resources for the Future, also would rise, although it's very difficult to make a quantitative estimate of that.

Nonetheless, it appears to me that these increases, while erosion and therefore, the policy issues with respect to soil conservation, would become more important, that those costs relative to total costs of producing agricultural commodities in the United States, still would remain relatively small.

It doesn't follow, of course, that because they're small, that we shouldn't do something about them. And in particular, as Sandra Batie's testimony has indicated, she cited some work done at the USDA indicating that we could get substantial payoffs in terms of reduced erosion at a relatively small cost if we targeted those funds more accurately on the places where erosion is a problem.

In order to do that, however, while our estimates of erosion now I think are pretty good, and they will be better when we get the data from 1980 to NRI, nonetheless, erosion, just the sheer amount of erosion is itself not a particularly good indicator of the size of the problem. As I indicated, the real issue is cost, the effects on the impacts on production costs and these off-farm costs. And in order to get a fix, a better fix, on those costs, we need more information. And, in particular, with respect to the effects on productivity, I commend to the committee as a way of thinking about this problem the chart or the graph that is included in Neil Sampson's prepared statement showing the relationship between erosion or soil depth and yield.

In order to be able to target more effectively, we need to know a lot more than we do now about the nature of those curves. Ideally, we ought to have that kind of information about all the major soils in all the major producing areas in the country. If we did, we would be in a much better position to spot those soils in those areas where the threat of erosion beginning to have a major impact on productivity is most pressing.

Consequently, we would be in a position, then, to know where we should move and something about the resources that would be worth putting into those areas.

We also, as I indicated, we know so little now about the off-farm damages of erosion that I think we need a major effort to fill in that missing information and I suggest that the Soil Conservation Service, while not itself a research institution or an institution without a research function, nonetheless could take the lead in organizing the effort that would be necessary, the resources in giving direction to the effort that would be necessary to make some headway on this important issue of getting more information about off-farm damages.

I mention targeting, as has, I think, practically everyone else who has testified here today. It's become kind of a buzzword. But that doesn't mean that it isn't a worthwhile idea. It seems to me that it just makes commonsense that if we're going to devote a certain amount of our national resources to dealing with the erosion problem, then we ought to focus them on the places where the problem is most severe.

And as Sandra's testimony indicated, evidently, we could make a major impact in reducing erosion if we targeted those funds more effectively and could do it at a relatively small cost.

In addition to devoting more attention and more of our resources to improving the data base and in addition to adopting targeting as a principal policy objective, a third issue or a third area, it seems to me, where in thinking about policy, we ought to be paying more attention, is research to develop technologies which will be land-saving and erosion-reducing.

Now in this connection, I, again, refer the committee to the graph or to the figures that Neil Sampson presented in his prepared statement and to his discussion of that graph. The thing that comes out of that, it seems to me, is that in thinking about how we meet this long-term objective of satisfying rising demand for food and fiber without incurring rising costs, we need to think of soil conservation and new technology as parts of a package that would move us most effectively toward achieving that objective.

Now this does not mean, obviously, the way I put it, I don't intend this to mean that technology could substitute in a wholesale way for the land. Clearly, it could not.

It does mean, however, that at the margin where we're using resources, when we're deciding to allocate a little bit more here or a little bit more there, there are some tradeoffs between where we put the most emphasis. An analysis of those tradeoffs would help us to decide where we get the maximum bang for the agricultural buck that the Government puts into these kinds of programs.

So I would encourage and endorse the idea of thinking of investment in development of new technology, new agricultural technology, and soil conservation practices—that is to say, through cost sharing and other measures for reducing erosion. Now we think of those two ways of using our resources as part of a package and within that package, we aim at finding that combination of programs, emphasizing reduction or control of erosion, in one case, development of new technology in the other, see that as a package in which what we aim at is to get the maximum payoff toward achieving this objective of holding costs down.

There are two kinds of technology in kind of a generic sense that I would emphasize. One is land-saving or yield-increasing technologies. Now, to some extent, Burt English has referred to this. There is a lot of reason to believe that in the natural course of events, we're going to get a certain amount of yield-increasing, land-saving technologies, similar to those that we had in the past 30 or 40 years in this country.

I think it doesn't follow, however, that the natural course of events, and by that I mean the play of market forces, will necessarily give us the rate of emergency of new land-saving technologies that we need in order to meet this overriding policy objective.

There's a case, I would argue, for thinking of public policies to encourage a more rapid rate of increase in yield-increasing technologies than the market alone would give us.

The other kind of technology that I emphasize is one that, again, finds much favor these days and I certainly favor it, and that's conservation tillage. One of the great things about conservation tillage is that it makes economic sense to farmers quite apart from its erosion benefits and, in fact, as Linda Lee has pointed out, conservation tillage is adopted on a lot of land that doesn't have an erosion problem at all. There's nothing wrong with that. But it does have important payoffs in terms of erosion control and there are a lot of places at the present time where conservation tillage isn't economical to farmers on poorly drained soils, in places where you can't control weeks with herbicides, and in the northern tier of States where the growing season is short, there are severe limits on the economic attractiveness of conservation tillage to farmers.

I think a research program that was directed toward extending those limits—that is to say, making conservation tillage economical to farmers in places where it presently is not—again would have high payoff in terms of meeting both our soil conservation objectives as well as the objective of meeting rising demand for food and fiber at constant or at least not increasing cost.

Thank you very much, Mr. Chairman.

[The prepared statement of Mr. Crosson follows:]

PREPARED STATEMENT OF PIERRE CROSSON*

Introduction

The urgency of soil conservation as a national policy issue depends upon how much erosion is costing the nation now and is likely to cost us in the future. The costs are in lost productivity of the land and in off-farm damages such as accelerated siltation of reservoirs, rivers, and harbors.

If agriculture continues to be characterized indefinitely by surplus production, as in the last year or two, the demand for land for crop production likely will diminish. Some land now in erosive crops such as corn and soybeans will be turned to pasture, forest, or range. Erosion will decline, and policies to protect the productivity of the land or deal with off-farm damages will have relatively low priority.

However, if demand for crops begins once again to grow strongly, as in the 1970s, more land likely will be needed for production of corn and soybeans and much of the additional land will be more erosive than land now in crops. Erosion likely would increase, perhaps sharply, and policies to control it to protect productivity and reduce off-farm damages would move up in priority.

One's judgment of the present and future importance of soil conservation policies thus depends heavily upon whether one is bullish or bearish about the future growth of American agriculture. I expect substantial growth in crop production over the next decade or so, spurred by rising foreign demand, especially in the developing countries. American farmers are likely to bring several tens of millions of additional acres under crops, with significant increases in erosion as a consequence. The discussion here of soil conservation issues and policies is based on that scenario.

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Importance of Distinguishing Between On-Farm and Off-Farm Erosion Costs[1]

The distinction between on-farm (productivity) costs of erosion and off-farm costs is crucial for thinking about erosion control policies. By definition off-farm costs are paid not by the farmer but by his neighbors or those downstream from him, but on-farm costs (lost productivity) are paid by the farmer himself. This has two consequences, one legal and one behavioral. In the American legal tradition, particularly since it has incorporated the notion that producers can be held responsible for damage they do to the environment, a strong case can be made in principle for direct public intervention to induce, or require, farmers to control erosion to reduce its off-farm damages. The legal case for intervention to reduce productivity losses is much weaker. So long as the damage the farmer does is limited to his own property and does not demonstrably injure the interests of identifiable other persons, the strong American commitment to fee simple ownership makes public intervention to require reduced erosion difficult. So far as I know the interest of future generations in maintaining the productivity of the land is nowhere considered as legal grounds for requiring farmers to control erosion.

The difference between off-farm and on-farm damages is important also because it affects farmers' incentives to control erosion. Since off-farm damages are not borne by the farmer he has no incentive to reduce them unless public intervention induces or requires him to do so. The farmer himself, however, bears the cost of lost productivity, giving him incentive to control erosion to reduce the cost. The question is whether the incentive is strong enough to induce control at a level consistent with the long-run social interest in the land as well as with the farmer's interest.

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[1] This section is taken from P. Crosson, "Impact of Erosion on Land Productivity and Water Quality in the United States," a paper given at the Second International Conference on Soil Erosion and Conservation, Honolulu, June 16-22, 1983.

This is a complicated question which cannot be discussed at length here. The argument that the farmer has incentive to reduce erosion to protect productivity is based on three propositions: (1) the modern American farmer is a good business man, alert to his own economic interests. (2) The land is by far his most important single asset. If its productivity declines, he loses. (3) Through long association with his land he knows when its productivity is threatened; at least he is likely to be more knowledgeable about this than anyone else, including those public officials who would urge him to take extra measures to control erosion.

Several arguments are advanced to counter this one. (1) The farmer may be responsive to market signals telling him to protect his land, but the signals are weak or nonexistent. In this argument, current crop prices, to which he responds, are lower than future prices, in which case the current price of the land underestimates its real long-term social value. (2) The farmer's time horizon is short relative to society's, so even if he recognizes the future threat of erosion, it is too far off to concern him. (3) High interest rates compel farmers to over-exploit the land now, even though they know they will pay even higher costs in the future because of erosion. (4) Many farmers are tenants with short-term leases. Consequently they have little incentive to make investments in erosion control since these pay-off only over the long term.

We have insufficient evidence to correctly weight these conflicting forces acting upon farmers' incentives to invest in erosion control. My own judgment is that as a group those farmers whose land is in fact threatened by erosion can and do take steps to counter the threat, but that their efforts may fall somewhat short of the amount needed to protect the social interest in the land. The main reason is that the market price of the land likely does not fully reflect the value of erosion control as a hedge against unexpectedly high future demands on the land or unexpectedly low emergence of new technological substitutes for the land.

The case in principle for erosion control policies to protect productivity clearly is not as strong as the case for policies to reduce off-farm damages. But for both kinds of damage the case for policies depends not only on principle but on how important the damges actually are. As a nation do they cost us much or little?

Magnitude of Erosion Costs

We know little about either kind of cost at present, but we have more information about productivity losses than we do about off-farm damages. At this writing there are only three studies providing rough estimates of the effects of erosion on national average crop yields. One of the studies was done at Resources for the Future and asked the question, what was the effect of erosion on the growth of yields of corn, wheat, and soybeans in the Midwest and northern plains between 1950 and 1980? The results indicated that yields of corn and soybeans increased about 4 percent less than they would have otherwise. The growth of wheat yields was not affected by erosion.

The effect of erosion on growth of corn and soybean yields, while small, nonetheless must have tended to increase costs of producing these commodities. However, the tendency was far more than offset by the effect of technological advance in reducing production costs. After adjustment for inflation corn prices in 1975-79 were 35 to 40 percent less than in 1950-54. This decline occurred despite an increase in real prices of farm production inputs and an increase in corn production of 139 percent. Real soybean prices also declined, although only slightly. However demand for soybeans increased much more rapidly than for corn, and in 1975-79 soybean production was almost 500 percent higher than in 1950-54. An increase this large accompanied by a slight decline in real prices could not have been achieved without rapid technological advance in soybean production.

The other two studies addressed the question of the effect on yield growth of 1977 rates of erosion if continued over 50 to 100 years. One of the studies was done by the Department of Agriculture as part of the 1980 Resource Conservation Assessment. It concluded that if erosion continued at the 1977 rate for 50 years, corn yields at the end of the period would be 8 percent less than they otherwise would be. The other study was done by a group of soil scientists at the University of Minnesota under the leadership of William Larson. It concluded that continuation of 1977 rates of erosion over 100 years would reduce national average corn yields by 5 to 10 percent from what they otherwise would be.

All three of these studies suffer limitations of data and methodology, but they concur in suggesting that even if extended over long periods of time the effect of 1977 rates of erosion on crop yields were, and will continue to be, small. It follows that the tendency of erosion to increase production costs would be weak. Even a very modest rate of technological advance, much less than that achieved in the last 30 years, would be sufficient to offset it.

Although our knowledge of the costs of erosion in lost productivity is slight, we know even less about the costs of off-farm damages. The best estimates--and they are not very good--indicate that two-thirds to three-quarters of the soil carried by runoff is deposited before it ever reaches a stream or other water body. Little is known about the ultimate fate of this portion of eroded soil, and its consequences are not always negative. Some of it, for example, may come to rest where the soil already in place is less fertile than the soil deposited, so the productivity of the site is increased by deposition. However, there appears to be a consensus that the more general effect of the deposited soil is negative. It clogs drainage ditches and irrigation canals, for example, imposing costs either of clean-up or of diminished productivity of the system where deposition occurs.

The relatively small proportion of the eroded soil which reaches a water body increases turbidity of the water when it is carried as suspended sediment and can cause several different kinds of damage when it finally is deposited. Turbidity can reduce the capacity of the water to support desirable varieties of fish, impair recreational values of the water, damage pumps and turbines, and impose costs of clean-up before it can be used for residential, commercial, and industrial purposes. Sediment deposited in reservoirs shortens their useful life, and sedimentation of rivers and harbors reduces their traffic handling capacity or increases the cost of dredging necessary to maintain capacity. Sedimentation of streams and rivers also reduces their capacity to carry water, hence increases the threat of flooding and consequent damages to property and to human health and safety.

It is much easier to describe possible off-farm damages of erosion than it is to estimate their costs. A study done at the Conservation Foundation by Clark and others systematically surveys the available data on these costs and finds it quite fragmentary. Some data are available on costs of reducing turbidity in public water supplies and on some of the other costs imposed by turbidity. However, there appear to be no data on costs of increased energy for pumping, on lost recreational values, or of damage to fish.

The report by Clark and others cites one source which estimates annual costs of lost reservoir storage capacity from sedimentation at $100 million in 1976. The report also gives an estimate by the Corps of Engineers that the annual cost of dredging harbors and waterways was $364 million in 1981. Other costs of sedimentation, however, such as from increased floods and lost recreational values, evidently are not available.

This brief review suggests the following summary statements:

1. We have no estimates of the total costs, nationwide, of the off-farm damages of erosion. However, if the partial estimates given in the report by the Conservation Foundation are reasonably accurate, the total annual costs likely amount to several billion dollars in current prices.

2. These costs, however, are for all sources of erosion, not just for agricultural land. The Department of Agriculture's Natural Resource Assessment asserts that only about 50 percent of the sediment delivered to the nation's waters originates on agricultural land. The rest comes from forest land, land in urban and transportation uses, and from streambank erosion. The latter accounts for roughly 25 percent of sediment delivered, and is especially significant for conservation policy. The energy dynamics of moving water and streambank soil are such that if the amount of soil

delivered to rivers from agricultural land is significantly reduced, the amount taken from streambanks may increase. Reducing erosion from agricultural land, therefore, may not reduce sediment delivered as much as expected.

3. Erosion from agricultural land thus is responsible for roughly one-half of several billion dollars in annual off-farm damages. Is this cost high or low? Clearly we need a standard of significance to answer the question. One is the percentage of these erosion costs in the total cost of all water related activities. When we think of the magnitude of these activities (all those which use the nation's waterways, lakes, and reservoirs for commerce, irrigation, recreation, energy generation, flood control, and so on), the contribution to total costs of sediment delivered from agricultural land must be small.

In summary, continuation of current rates of erosion from agricultural land over the next 100 years almost surely would have a small effect on the costs of producing food and fiber and on the costs of all water using activities. But what if demand for agricultural output, particularly for crops, grows so fast that additional land is brought into production? Would costs of productivity losses and off-farm damages remain small?

The answer obviously depends in large measure on how much erosion would increase. In a study done at Resources for the Future,[2] it was concluded that increased demand for crops could induce farmers by 2010 to bring an additional 60-70 million acres into production compared with the amount used in the late 1970s. Under these circumstances cropland erosion would increase roughly 80 percent and sediment delivered from cropland would about double. If this happens, and the higher rate of erosion is maintained, then the costs of lost productivity and of off-farm damages clearly would rise. Instead of productivity losses being 5 to 10 percent over 100 years they might be 10 to 20 percent. And the cost of off-farm damages likely would at least double.

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[2] Pierre Crosson and Sterling Brubaker, Resource and Environmental Impacts of U.S. Agriculture, Resources for the Future, 1982.

These costs clearly would be more important than if erosion stays at current levels. However, even if erosion tended to increase crop production costs by 20 percent over 100 years instead of 5 to 10 percent, the tendency would be more than offset by even a slow rate of technological advance. And costs of sediment delivered are such a small percentage of total costs of water related activities that after doubling they would continue to appear small.

My conclusion is that prospective rates of erosion from agricultural land likely will have a small long-run effect on costs of producing food and fiber and on costs of water related activities.

Although both sorts of costs likely will continue to be relatively small, it does not follow that as a nation we should not try to do something about them. If there are measures to control erosion or to offset its effects which cost less than the damages erosion causes, then we should push for their adoption. This perspective suggests some guidelines for thinking about soil conservation policies and programs.

What Should We Do?

Improving the data base. In the first place, it is clear that lack of information about both on-farm and off-farm damages of erosion seriously impede the development and implementation of cost-effective soil conservation policies. The problem is not want of data on erosion. The 1977 National Resources Inventory provided (for the first time) enough such data to serve useful policy purposes. And the 1982 NRI will greatly enrich that data base. The problem instead is that we do not know enough about the long-term effects of erosion on productivity of the soil or about the off-farm damages it causes. The modeling work begun by the group at the University of Minnesota has great promise for extending our knowledge of productivity effects and should be encouraged to continue at an increased level. The Agricultural Research Service, with input from the Economic Research Service, has work under way at Temple, Texas to develop the Erosion-Productivity Impact Calculator (EPIC) model for predicting the effects of erosion on crop yields. This work is part of the Department of Agriculture's 1985 Natural Resource Assessement, and shows much promise for extending our knowledge of long-term effects of erosion on productivity. EPIC is quite different from, and complementary to, the University of Minnesota model. Both deserve continuing and expanded support.

No modeling efforts of comparable scope are under way to investigate costs of off-farm erosion damages. The Soil Conservation Service seems the appropriate agency for taking the initiative to launch such an effort. The SCS is not itself a research agency, but it could take responsibility for mobilizing the resources and engaging the efforts of other agencies needed to undertake this important task.*

Targeting. This has become a "buzz" word signifying reform in the allocation of federal soil conservation funds. Buzz word or not, targeting is simple commonsense. Studies of soil conservation programs by the General Accounting Office and by the Agricultural Stabilization and Conservation Service leave no doubt that over the years a substantial proportion of conservation funds were spent on land where erosion was not a serious problem. If funding were concentrated on the 10 percent of the cropland that accounts for 90 percent of erosion in excess of 5 tons per acre per year we undoubtedly would greatly increase the pay-off to our erosion control dollars. With those dollars in increasingly short supply, the argument for targeting becomes all the more compelling.

Care should be taken, however, in using erosion per acre as the guide for identifying targets. The issue is not amount of erosion per se but the damage it does to productivity on the farm and to water resources off the farm. On the shallow soils of the Southeast sustained erosion of 5 tons per acre per year is a greater threat to productivity than twice that amount on the deep loess soils of western Iowa. Similarly, a given amount of erosion will impose higher off-farm costs if it occurs in a steep watershed above an important reservoir than if it occurs in a more gently rolling watershed with no significant downstream works or population centers.

The SCS now considers that erosion is a threat to productivity on all soils where losses exceed T (Tolerable soil loss) values. These values vary from 1 ton per acre per year on shallow soils to 5 tons per acre per year on deep soils. The origins of the T standard are vague, but it evidently reflects a mixture of ideas about the rate at which topsoils form and practical considerations of farmers' receptiveness to soil conservation practices.

The advantage of the T standard is that it clearly identifies soils where conservation should be targeted, if one accepts the standard. The disadvantage is that it ignores the issue of the proper timing of conservation. On deep soils, e.g., those in western Iowa, erosion may exceed T for a century or more with little effect on productivity of the soil. It makes no economic sense for the farmer or for the society to invest now in conservation practices on these soils simply because erosion exceeds T. (It may make sense, however, in order to reduce off-farm damges.) The resources required for such practices would earn a far higher return for the farmer and for society if they were invested in something else. This does not mean that investment in erosion control on these soils would never pay. Eventually it probably would, but eventually is not now.

The proper timing of investment in erosion control, therefore, is essential to obtain the best use of conservation resources. Farmers are well aware of this. They know that conservation pays when the threatened loss of productivity costs more than the conservation measures, and not before. If the SCS would accept this principle as a guide to targeting its efforts instead of blindly following the T standard it would find farmers more receptive to its advice. And the pay-off to soil conservation dollars would be higher.

Research. It was noted above that the tendency of erosion to increase production costs over the last several decades was completely swamped by the cost-reducing effect of technological advance. And it was stated that given prospective rates of erosion, this would continue to be true even if the pace of technology slows.

One's judgment about the importance of erosion effects on productivity thus is necessarily influenced by one's expectations about the development of new cost-reducing agricultural technology. Investment in research to develop such technology can and should be viewed as a policy instrument available to deal with erosion as a threat to productivity. In principle, some of the resources invested in erosion control to protect productivity may contribute more to holding down production costs if invested in development of new technology. This is not an "either or" proposition. It is one of establishing trade-offs between erosion control and new technology as alternative ways of avoiding increases in production costs. Some amount of investment in each alternative no doubt can be justified, the question being how much in each would be most cost-effective overall. The point I wish to make here is that the new technology alternative should be introduced into our thinking about soil conservation policies to protect productivity.

The emphasis should be on new technologies which offer most promise of holding production costs in check while reducing off-farm damages of erosion. This suggests two paths of desirable technological change. One would lead to higher yielding technologies. These would make it possible to meet rising demand with a smaller land base and to concentrate production on the least erosive land. More fragile land could be put in pasture or forest to protect its productivity, and the diminished amount of erosion would reduce the threat of off-farm damages.

The second path leads to increased adoption by farmers of conservation tillage. Compared to conventional tillage with the moldboard plow conservation tillage reduces erosion on erosive soils by 50 to 90 percent, depending on the slope and other characteristics of the land. Conservation tillage has spread rapidly among American farmers in the last 15 years, and now is used on 25 to 30 percent of cropland. However, the technology does not do as well as conventional tillage on poorly drained soils, where weeds cannot be controlled with herbicides, and where the growing season is short. (The crop residue accompanying conservation tillage delays warming of the soil in spring, thus slowing germination and seedling emergence.)

Research to extend these limits would give farmers incentive to adopt conservation tillage in areas and on soils where it now is uneconomic. The pay-off to this research, both in protection of soil productivity and in reduction of off-farm erosion damages could be substantial. There is a caveat, however. Because of its greater reliance on pesticides, especially herbicides, conservation tillage may present a greater hazard to the environment than conventional tillage. Present evidence suggests that herbicides do not pose a major environmental threat, but the evidence is incomplete. Research to extend the limits of conservation tillage should include careful investigation of these potential environmental impacts.

Senator JEPSEN. I thank you. I thank all of you for some very interesting and stimulating testimony. A central question is, Who should pay for the conservation facilities and practices? If I may, since I have four people dealing with economics, I would like to ask the question of each one of you. Give me a one or two liner, if that's possible.

Who should pay for conservation facilities and practices? The farmer? The consumer? In your judgment, who are the primary beneficiaries of soil and water conservation? Elaborate on that as much as you'd like.

We'll start with Mr. Crosson. Who should pay for the conservation?

Mr. CROSSON. I think that in answering that question, this distinction I made between off-farm and on-farm damages is crucial. I think there's a strong case, in prinicple at least. Now maybe there are political problems with this, but in principle, at least, there's strong case to be made for requiring farmers to reduce erosion where the principal threat is off farm; that is to say where, as a consequence of what they do, there are people downstream from them who have costs imposed on them, including the society generally, that is to say through these various damages from accelerated siltation of reservoirs, increased threat of flooding, and all that kind of thing.

In principle, I think that there is a case for requiring farmers to meet conservation practices where the objective is to reduce those damages. We do that, essentially, in our policies with respect to industry, so-called point sources of pollution, require that scrubbers be put on power plants, that various kinds of wastes be treated before they be put into the Nation's water bodies.

I think the same principle applies in agriculture. But where the principal threat is to the productivity of the land, it seems to me that the issue is different, if it appears that the farmer, acting in his own interest, is not going to achieve a level of soil conservation which, as a society, we think is desirable, then I think that society ought to pay for that additional protection.

Senator JEPSEN. Ms. Lee.

Ms. **Lee**. Thank you. I think, as has been pointed out here today, there are some types of conservation practices such as conservation tillage that can be profitable to an individual farmer and can result in savings in labor and energy costs in addition to saving soil.

So I think where you have a practice such as conservation tillage that may be economically profitable for some farmers, it does not make sense for society to subsidize the adoption of a practice that they might adopt, anyway, as it's in their best interest.

However, conservation tillage may not be profitable for all farmers. There are other types of practices such as terraces that may not be profitable. In these cases, I think there may be a case for society bearing part of the cost.

Senator **Jepsen**. Ms. Batie.

Ms. **Batie**. Well, I concur with what Mr. Crosson and Ms. Lee have said. I think also, to be honest about it, it's far more politically feasible for the public to share some of the expenses of environmental improvement by husbanding the soil resource and protecting our water quality.

I mean, I know Mr. Crosson referred to the fact that we have required industrial polluters to put on scrubbers, et cetera. But if we look at that very closely, we have also given numerous public dollars in terms of tax credits and funds to assist people. Then we look at the farming community where we're very concerned about protection of the small landowner. I think the argument becomes even more persuasive that public dollars should be and will be involved, both to make this happen, make it politically feasible, and also because I think we have historically felt that we should be protecting some of the smaller farmers from the problems of the lower profit picture that is associated with being a small farm landowner.

Senator **Jepsen**. I thank you. I want to point out that food producers, farmers, have a unique problem in that it is very difficult for them to pass on any costs directly. You mentioned industrial polluters being required to put on air scrubbers or coal scrubbers. But tax credits and so on are given. Also, as is characteristic of our private sector and our free enterprise system, they can pass on those costs and, in fact, do.

The farmer has kind of got one hand tied behind him before he attempts to do this in that he just simply cannot pass those costs on.

Ms. **Batie**. You are certainly right, Senator, in the sense that if we take the unprofitable practices and we insist that the farmer is going to bear the full burden of putting those practices on the land, and that they will, for one reason or another, have to place those practices on the land, we're going to have fewer farmers.

Senator **Jepsen**. True. Mr. English.

Mr. **English**. I think the question is posed—I'll answer it in this manner. Society, the soil conservation problem, I believe wants to hasten the adoption of, let's say conservation tillage. Even though conservation tillage appears profitable, and farmers, it seems like they should adopt it rather quickly, society would like to hasten that adoption to reduce the soil erosion problem and in that manner, they must invest in educational resources, in demonstration plots, farms, and things like that, to quicken this adoption process.

In addition, people are encouraging conservation tillage and it's kind of concerning to me. I encourage it, too, conversion to that particular method.

We have very little knowledge on the yield variability on various soils of conservation tillage. We don't know if—we have a good indication right now that during droughty years, conservation tillage is a better moisture conserver and, therefore, slightly higher yields over conventional tillage occurs.

Other than that, that's about as far as we go and it's in a very general framework.

So farmers are very uncertain about this method, and understandably so if the information is not out there for him to get his hands on. I think that public dollars are definitely needed in that direction for finding this information out and getting it to the farmers. The actual adoption of conservation tillage, I think, will occur once this process occurs.

Senator JEPSEN. I thank you and I thank the panel for their participation today. Is there any member of the panel who has a closing statement or anything that they would like to add for the record?

Mr. ENGLISH. I've got just one statement based on those charts that were shown there.

The green, yellow, and red areas, I was kind of concerned in the measurement of fragile land being soil loss, solely soil loss. I don't think that's so. As we said here, the entire soil—by simply switching from one tillage practice to another, a red area could become a yellow area. I don't know if it can move down to a green area, but it certainly can become a yellow area.

I think that that should be recognized in this hearing, that those were measurements done on a point sample.

The second thing I do have to add is that you asked a question to Norm Berg earlier about could we go out and get the information necessary on how farmers worked on PIK? I think you can if you stick with the sample such as the NRI that has already been taken.

We know what the land was in 1982. Go back and visit those exact points in 1983 and find out what changes have occurred.

Senator JEPSEN. Thank you. Anyone else? [No response.]

I thank you for coming. I would advise that "Financing Agriculture in the 1980's" is the subject of our next panel hearing, which will be tomorrow at 10 a.m. The members of that panel will be: Frank W. Naylor, Under Secretary for Small Community and Rural Development of the U.S. Department of Agriculture; George Irwin, Chief Economist, Farm Credit Administration; Thomas Olson, chairman, Agriculture-Rural America Committee of the Independent Bankers Association of America; and Marvin Duncan, who is vice president and economist, Federal Reserve Bank of Kansas City.

I thank the panel members again for their time and effort and for their testimony.

Thank you very much.

Mr. CROSSON. Thank you, Mr. Chairman.

Senator **Jepsen**. Have a safe trip home. The committee will stand in recess.

[Whereupon, at 12:37 p.m., the committee recessed, to reconvene at 10 a.m., Thursday, June 23, 1983.]

TOWARD THE NEXT GENERATION OF FARM POLICY

THURSDAY, JUNE 23, 1983

Congress of the United States,
Joint Economic Committee,
Washington, D.C.

The committee met, pursuant to recess, at 10:05 a.m., in room SD-124, Dirksen Senate Office Building, Hon. Roger W. Jepsen (chairman of the committee) presiding.

Present: Senators Jepsen and Abdnor.

Also present: Robert J. Tosterud, professional staff member.

OPENING STATEMENT OF SENATOR JEPSEN, CHAIRMAN

Senator Jepsen. I am extremely pleased to welcome our witnesses this morning. The subject of today's hearing is "Financing Agriculture in the 1980's." Our witnesses are: Frank Naylor, Under Secretary for Small Community and Rural Development, Department of Agriculture; Marvin Duncan, Vice President and Economist for the Federal Reserve Bank of Kansas City; George D. Irwin, Chief Economist, Farm Credit Administration; and Thomas Olson, chairman of the Agriculture-Rural America Committee, Independent Bankers Association of America.

As I am sure the witnesses are aware, there are several trends in farm finance, which are of great concern. The first, of course, is the tremendous growth in the total outstanding farm debt. Between 1977 and 1982, outstanding farm debt almost doubled from $95.4 billion to $181.6 billion. During the last 5 years, farmers have been adding to their debt at an annual rate of 12 to 13 percent.

Second, 1981 interest payments on farm real and nonreal estate debt become the largest single farm production expense, exceeding feed costs and expenses for fertilizer, fuel, hired labor, and livestock purchases. In 1981, farmers paid $19 billion in interest charges, compared to $9.5 billion only 3 years earlier. Interest payments increased over 25 percent between 1980 and 1981, with interest rates at historical highs.

While agriculture was incurring an additional debt of $19 billion during 1981, it also suffered a $19 billion decline in equity. As a result, the overall debt-to-asset ratio at the start of 1982 was at its highest level since the 1940's.

The distribution of farm debt among lending sources has also changed dramatically during the last several years. Most notable and bothersome is the decline in the share of agricultural lending provided by commercial banks. As late as 1979, commercial banks held 12 percent of outstanding farm real estate debt and 43 percent of farm nonreal estate debt.

In 1982, commercial banks held about 8 percent of real estate debt and 36 percent of nonreal estate debt.

The Federal Land Banks and the Farmers Home Administration now account for more than one-half of farm real estate debt. The Farmers Home Administration, plus loans made or guaranteed by the Commodity Credit Corporation accounted for 23 percent of farm nonreal estate debt in 1982 compared to only 6 percent in 1977.

Agriculture is becoming increasingly dependent on federally sponsored lending institutions. Who is going to finance agriculture in the 1980's is indeed an important question.

I want to remind our listeners on National Public Radio that they can participate in these hearings by mailing their views on future farm policy to Box A, Joint Economic Committee, Washington, D.C. 20510.

Finally, while this is our last in this series of hearings in Washington, the Joint Economic Committee is far from concluding its pursuit of the next generation of farm policy. As I stated at the beginning of this series of hearings, Washington is not the source of all wisdom. I am pleased to announce the dates and locations of the first four regional field hearings. On July 1, a regional field hearing will be held in Des Moines, Iowa. It will be chaired by myself. On July 5, a regional hearing will be held in Sioux Falls, S. Dak., chaired by Senator Abdnor. On July 8, a regional hearing will be held in Boise, Idaho, chaired by Senator Symms. And on August 8, a regional hearing will be in Clarksville, Ind., chaired by Congressman Lee Hamilton, who is also vice chairman of this Joint Economic Committee.

If you wish further information with regard to any of these hearings, please contact the member chairing the regional hearing in your area.

I have been advised that Secretary Naylor has a very crowded schedule this morning. He has asked, and I am pleased to respond in the affirmative that we hear his testimony first. If there are any questions, we will have them, following which we expect that you will be leaving immediately.

I would advise all members of the panel that your prepared statements will be entered into the record. So you may proceed with your testimony.

As I indicated to the panel earlier, the buzzers in this particular room are louder than in any other building in the Capitol.

[Rollcall bells interrupted the hearing at this point.]

Senator **Jepsen**. You now know what I mean. [Laughter.]

We will now proceed. Welcome to all of you and thank you for coming.

We will enter the written opening statement of Senator Abdnor in the record at this point.

[The written opening statement of Senator Abdnor follows:]

Opening Statement of Hon. James Abdnor

IT IS A PLEASURE TO WELCOME THESE FOUR NOTED EXPERTS TODAY. YOU GENTLEMEN REPRESENT THE INTERESTS OF THE CREDIT COMMUNITY IN THE AGRICULTURE ECONOMY. I CONSIDER THIS HEARING TO BE ONE OF THE MOST IMPORTANT OF THIS SERIES OF EIGHT HEARINGS, BECAUSE TODAY'S FARMER MUST BE AS SHARP BEHIND THE PENCIL AS HE IS BEHIND THE PLOW. TODAY'S FARM FINANCE AND BUSINESS MANAGEMENT PRACTICES ARE AS IMPORTANT AS PRODUCTION TECHNIQUES IN THE FIELD.

YOUR ATTENDANCE HERE SHOWS THE INTEREST OF OUR NATION'S CENTRAL BANK, PRIVATE BANKS AND THE FEDERAL GOVERNMENT IN ADDRESSING THE FINANCIAL NEEDS OF AGRICULTURE IN THE FUTURE. THE BANKING INDUSTRY HAS GONE THROUGH MANY CHANGES IN RECENT YEARS AND THE AGRICULTURAL SECTOR IS AFFECTED BOTH DIRECTLY AND INDIRECTLY. BANKING IS NOW INTERNATIONAL IN SCOPE, NOT JUST DOMESTIC. FOR EXAMPLE, WORLD INTEREST RATES AND CURRENCY EXCHANGE RATES AFFECT COSTS OF PRODUCTION AND THE PRICE OF OUR EXPORTS.

WITHIN OUR DOMESTIC ECONOMY, BANKING DEREGULATION, TECHNICAL ADVANCES IN HOW BANKING SERVICES ARE CONDUCTED, AND NEW FINANCIAL INNOVATIONS AVAILABLE TO THE PUBLIC, ARE CHANGING THE WAY FARMERS HANDLE THEIR MONEY MATTERS. THE FEDERAL GOVERNMENT, TOO, IS CHANGING ITS PARTICIPATION IN AGRICULTURAL CREDIT PROGRAMS.

ALL OF THESE FACTORS HAVE EXPOSED THE AGRICULTURE ECONOMY TO MARKET CONDITIONS FACING THE OVERALL ECONOMY. PREVIOUSLY, AGRICULTURAL LENDERS AND BORROWERS WERE INSULATED FROM FLUCTUATIONS OF LARGER MONEY MARKETS. IF WE ARE SUBJECTING OUR PRIMARY FOOD INDUSTRY TO THE UNCERTAINTIES OF THE MARKET, THEN ARE WE ALSO SUBJECTING BOTH FARMERS AND CONSUMERS TO UNCERTAINTIES IN PROVIDING ADEQUATE FOOD SUPPLIES? AND WILL SUCH UNCERTAINTY JEOPARDIZE THE NATIONAL INTEREST AND OUR WELL BEING?

AGAIN, I WELCOME MR. NAYLOR, MR. DUNCAN, MR. IRWIN AND MR. OLSON. I LOOK FORWARD TO HEARING YOUR TESTIMONY.

Senator JEPSEN. Mr. Naylor, you may proceed, please.

STATEMENT OF FRANK W. NAYLOR, JR., UNDER SECRETARY, SMALL COMMUNITY AND RURAL DEVELOPMENT, DEPARTMENT OF AGRICULTURE

Mr. NAYLOR. Mr. Chairman, it is indeed a privilege for me to have the opportunity to appear before your committee today and to discuss the future of agricultural credit, which is the primary responsibility of my particular area of the Department of Agriculture.

I think it would be appropriate to submit the statement for the record, but to summarize some of the observations related to it.

I think to put into perspective what we need to be looking at for the remainder of this decade, we must also understand what happened in the previous decade. Beginning largely in 1970 as a baseline, there was a rapid increase in the total outstanding farm debt, increasing from $54 billion at the beginning of that decade, to an estimated $221, almost $222 billion at the end of this calendar year after beng adjusted for the PIK program.

During that period, farm operations, with the full support of the credit industry, rapidly expanded their capital investment, real estate investments and the size and scope of their operations. During the early part of that decade, though, it, unfortunately, was too often relied on the equity of real estate rather than on the cash flow and the ability to repay current debt as the basis for making the loans that were provided for farmers during that period.

In the late 1970's, really around 1977, the commercial and farm credit system found it necessary to review more closely and to begin to tighten up some of their loan standards. At that time, Congress interceded with the passage of the Economic Emergency Act which increased substantially the Farmers Home Administration activity in the farm belt. Unfortunately, many of the provisions of that particular lending program were exceedingly liberal, did not require adequate collateral, did not require the demonstration of adequate repayment ability for individual producers, and that added substantially to the stress and problems that much of the financial agricultural lending created at that time.

Thus, as we entered the 1980's, with a period of escalating interest rates, with a period of high inflation and large agricultural surpluses, we found a small, but significant number of producers under major economic stress. In the past 2 years of operations, as you so accurately pointed out, the market share of the Farmers Home Administration coupled with CCC will rise to 28 percent of the short-term market share of lending in the current year. This far exceeds the historic 3 percent that the Department of Agriculture and Farmers Home Administration and CCC historically have had of that particular market.

In real estate lending, our market share has remained approximately at its historic norm of 8 percent of the market share, while much of the real estate lending has moved over to the Federal Land Bank system, which now is the largest single holder of that type of credit.

Delinquency rates have remained above desired levels, both for the Farmers Home Administration and the commercial and farm credit system. But during the last two seasons, I think it is important that we particularly in this administration commend both the commercial banking system and the farm credit system for their willingness to make a significant effort to cooperate and work with the Farmers Home Administration, and more importantly, work with individual producers to insure that an adequate supply of credit continued to be available.

I think it is worthy of note that certainly the PIK program has made it possible for many commercial lenders and farm credit system lenders to be able to continue to supply commercial credit which might otherwise have had to have been terminated this year without the program, and that has certainly been a major benefit in helping us through this economically difficult period.

During this period of economic stress, foreclosure rate has become a highly visible issue. Although the actual numbers of foreclosures have remained small, they are a genuine reason for concern. During the 1983 lending season, within the Farmers Home Administration, foreclosures appear to be leveling off and in some areas, are even beginning to show a slight decline.

I think it's also important for us to keep in perspective, and those of us in the financial industry tend not to even believe this figure ourselves, on occasion, but of the Nation's 2.4 million farm operators, roughly half do not have any short-term debt or any real estate debt. But I think it's also important to remember that most of those are predominantly in the part-time farming operations and have substantial off-farm income. And among our commercial or what we call our production operators, as many as 45 percent of all farmers in the $200,000 gross sales category and over, have debt-to-asset ratios in excess of 40 percent compared to the average for the total farming community of about 20 percent.

This has developed for us a group of producers, and one of the areas being your own, Senator, in which there is a significant concentration of highly leveraged farmers that are in production agriculture that are continuing to feel some financial difficulty.

With that background, where do we go from here, at least from a Government perspective?

During the last 2 years, the Farmers Home Administration has increased its short-term lending which has been the most critical need for funds by initially 150 percent, but is now more realistically at close to 200 percent of the level of funding that was in place at the time that this administration took office. We will have available this year, with the reprogramming done by the Agency, approximately $1.8 billion for short-term lending. Our real estate lending activities have remained approximately stable, and we have seen a significant decline in the level of activity of our disaster lending as weather conditions warranted that reduction to occur.

Frankly, as we begin to look at the authorities available to us and some of the proposals that have been under discussion both in Congress and in public, I think we need to remember that the Farmers Home Administration, using the great discretionary authority earlier provided by Congress, provided some sort of special relief for consideration or assistance to some 40,000 of its 270,000 borrowers in 1982, and that we expect a very similar pattern to continue this year and into the future until we see a significant improvement in the general agricultural situation.

In responding to farm lending needs, though, I think it is also important to observe that it is becoming increasingly important for Farmers Home to resume and maintain the role of a provider of supervised credit in order to insure the best probability of success of those who are required or find it necessary to borrow money from the Farmers Home Administration. It is also becoming increasingly clear that the various agricultural disaster programs, while well-intentioned and well-meaning, and particularly those which involve credit, have not successfully responded to the financial stress being experienced by producers when a major natural disaster occurs. The unpredictability of natural disasters faced by our producers should be treated in the same way that a casualty loss is treated for any small business operation.

It is our feeling that the best solution to this problem is not a continued variety of Federal programs, certainly not of the lending variety, but through the continued pursuit of a sound Federal, multiperil crop insurance program. We believe significant improvements in progress is being made in that undertaking and with that successfully occurring, that we should withdraw from other forms of agricultural disaster assistance. And in doing that, the Government should return to focusing its primary role on its long established, well proven, and sound programs of fundamental, short-term and real estate lending.

We believe that we continue to have two primary roles within the Government. The first is to provide assistance to those producers who, throught no fault of their own, have temporarily lost their creditworthiness, but who, with supervised credit and support of other USDA agencies, have reasonable expectation of returning to a sound farming operation. And that role, if we have the adequate personnel and funding available, which we believe we currently do, is one that we have done well and can do well into the future.

There will also be a continuing need for us to provide an alternative source of support for new producers, any entering the farming business who, for a variety of reasons, are unable to qualify for normal commercial credit sources. That role is one which the agency has served for several decades and I think done a very reasonable and responsible job.

If we are able to eliminate or make full use of the multiperil crop insurance program and eliminate those programs which have not proven themselves to be effective, and we adequately fund, which I believe we are proposing to do both this year and in the proposed budget for 1984, and well into the future beyond that, the necessary funding to meet our level of responsibility within the Government, I think the Farmers Home Administration can and, properly, will, resume its established role within legislation. I am convinced that in making these comments, that the farm credit system will and, fully is capable, of continuing to fully meet the credit needs that are being placed upon it by its cooperative members.

I am also equally convinced, despite the many changes which the commercial banking sector finds itself going through in part of the process of deregulation, that the rural country bank will continue to serve as a cornerstone of agricultural credit within the communities which they serve, albeit, it may be with some significant change in form and substance, but nevertheless, those two fundamental sources of credit will continue, and must continue, to be the principal source of funding for the agricultural community, with the Farmers Home Administration serving its traditional role of providing the bridge for those producers who need our kind of assistance on a temporary basis.

Mr. Chairman, it is my privilege to have the opportunity to appear before your committee today. I am very appreciative of the chance to share these observations with you. You have an outstanding panel here from the credit field that I am confident will give you a broad and very important perspective on the overall credit situation in agriculture today.

I would be most pleased to answer any questions that you might have.

Thank you.

[The prepared statement of Mr. Naylor follows:]

PREPARED STATEMENT OF FRANK W. NAYLOR, JR.

Mr. Chairman and Members of the Committee, I appreciate the opportunity to appear before you and discuss agricultural credit issues. In assessing future prospects of financial credit for the agricultural sector, it is necessary to review and place in perspective the trends which began to emerge during the decade of the 1970's. Beginning in 1970, there was a rapid increase in the total outstanding farm debt from a level of $54.5 billion to an estimated $221.7 billion as of December 31, 1982 after adjustments for PIK. During the 1970's as farmers expanded their operations, investing heavily in capital equipment, the lending community made credit readily available. The credit worthiness of these loans relied heavily on generally low interest rates and rapidly inflating real estate values which continued to rise throughout the decade. In addition, many lenders failed to provide sufficient supervision for their agricultural loans and failed to place adequate importance on the ability of these loans to "cash flow" on a current basis.

Beginning essentially in 1977, both commercial and Farm Credit Administration lenders found it necessary to review agricultural loan standards more thoroughly. At this same time, Congress passed the Emergency Agricultural Credit Adjustment Act of 1978 which provided unusually liberal lending standards for the Farmers Home Administration. This Act, coupled with a similar program administered by the Small Business Administration, produced a massive run-up in Federal farm lending, significant amounts of which were of poor quality and in many instances counterproductive to the best interest of the individual producer. Thus, as the agricultural community entered the decade of the 1980's -- a period marked by escalating interest rates, high inflation and large agricultural surpluses and depressed agricultural commodity prices -- a small but significant number of agricultural producers found themselves under major economic stress.

In the past two years of operation, the Farmers Home Administration's share of the short and intermediate term credit market climbed to 15 percent, five times the Agency's historic share of 3 percent. CCC's market share reached 13 percent. In real estate lending, FmHA's market share remained at the historic norm of approximately 8 percent.

Delinquency rates have continued to remain above desired levels for both the Farmers Home Administration, commercial lenders and the Farm Credit System. However, during the last two lending seasons, the commercial and Farm Credit System lenders have made a significant effort to work with their borrowers and to cooperate with the Farmers Home Administration in providing adequate credit for individual producers to continue their operations. Commercial and Farm Credit System lenders report that the PIK program has made it possible to continue lending to a number of producers whose commercial credit would have had to have been terminated.

During these times of economic stress, foreclosure has become a high visibility issue. Although the actual number of foreclosures remained small, they are a reason for concern. During the 1983 lending season, foreclosures appeared to be leveling off, and in some areas even began to show a slight decline.

It is important to remember that of the nation's 2.4 million operators, approximately half have neither real estate nor short term operating debt. Those with substantial debt to asset ratios are predominantly found among the large scale farm operators. As much as 45 percent of all farm operators in the $200,000 and over sales class carry debt to asset ratios in excess of 40 percent. This compares to a 20 percent average ratio for all producers having agricultural debt.

The most significant concentration of highly leveraged farmers appears to be in the West, North Central and Mountain States. The types of farms showing the highest percentage of high leverage operators are poultry and egg, corn, cotton and hog operations. A number of commercial and Farm Credit System borrowers continue to have significant cash flow problems. Sustained improvement in this position must come through a reduction in interest rates and/or restructuring of the balance sheet at the farm level to reduce amortized payments.

All sources of agricultural credit report continued availability of funds to credit-worthy borrowers. During the last two years, the Farmers Home Administration has increased by over 150 percent the funds available to its borrowers for short-term credit. Most lenders continue to report a willingness to exercise forbearance with customers experiencing cash flow problems. The Farmers Home Administration last year provided special assistance to borrowers under stress through the use of subordination, rescheduling, reamortization, and other authorities available to them. These authorities were used on an individual basis in approximately 40,000 cases. The FmHA loan repayment moratorium proposals are not a solution to the problem of financial stress in the farm sector. FmHA has exercised considerable forbearance and expects to continue to do so with those producers showing any reasonable expectation of a successful operation.

In looking to the future, it is expected that the Farm Credit System and commercial lenders will continue to be able to supply adequate agricultural credit of all types to creditworthy borrowers. The Farmers Home Administration expects to continue to supply a significantly increased portion of short-term credit to meet crop year requirements for those producers experiencing financial stress.

In responding to these and other farm lending needs, it becomes increasingly important for FmHA to resume and maintain the role of provider of supervised credit in order to insure the best probability of success for those producers assisted through Government programs.

It is becoming increasingly clear that the various agricultural disaster programs, and particularly those which involve credit, have not successfully responded to the financial stress experienced by producers when a major natural disaster occurs. The unpredictable natural disasters faced by farmers should be treated in the same way that a casualty business loss is treated by the business community. The long-term solution to this problem is not through additional lending programs but through the continued pursuit of a sound Federal multi-peril crop insurance program. Significant progress has been made in correcting the problems experienced by the Federal Crop Insurance Corporation during the period shortly after the passage of the 1980 FCIC legislation. As this program develops, general producer acceptance and the support of the financial, commodity and farm organizations have begun to show a marked increase. Steps should be taken to discontinue legislatively the remaining disaster programs.

Once this is done, the Government role can be focused on providing supervised credit to those producers who, for a variety of reasons, have temporarily lost their ability to obtain credit from commercial and farm credit sources. With proper assistance and support from USDA, a producer with a reasonable expectation of success should be able to return to a position as a sound credit risk. In addition, there will continue to be a need to provide real estate and short-term credit to individuals with appropriate agricultural training and experience who are otherwise unable to obtain credit to enter production agriculture. The programs of FmHA which support these two objectives are well established and have shown themselves to be effective when allowed to operate with adequate supervision and support by agency personnel.

The Farm Credit System, as a farmer owned cooperative, is expected to continue to respond with full capacity to the credit demands of Production Credit Associations, Federal Land Bank Associations, and the Banks for Cooperatives despite increasing funding requirements. In a deregulated environment, commercial lenders will undoubtedly analyze increasingly their role in the agricultural lending field. But the traditional position held by the small rural bank as a primary lender will remain one of the cornerstones of credit support for the agricultural community.

Clearly there have been and will continue to be a number of problem areas in the agricultural credit sector. However, with the implementation of PIK, significantly reduced inflation and lowered interest rates, the prospects for improving the agricultural economy are bright. The agricultural credit industry can be expected to meet fully its role of support of that economy with adequate credit resources for the future.

Senator **Jepsen**. Thank you, Mr. Naylor. You mentioned government lending some years ago. A lot of it was made on the basis of equity rather than cash flow. Did the commercial banks do the same thing, in your opinion, during those times?

Mr. **Naylor**. Yes, Mr. Chairman. I think probably during the early 1970's, particularly, and even through the entire decade, there were too many instances where many of us in the commercial industry, in the farm credit system, tended to make loans based on appreciation in real estate without assuring ourselves that there would be adequate cash flow to keep them current and, in fact, many of those loans were rolled over almost annually on that basis, in some cases.

Senator **Jepsen**. That brings me to my next question. There are some folks who have been a little bit troubled today because of that procedure. As you are well aware, there is considerable activity in the Congress regarding the need to enact emergency farm credit legislation. Such legislation would generally prohibit or delay farm foreclosure actions.

While I ask the question, I put a disclaimer on it to make sure that you understand that it is not necessarily the opinion of the Chair as to the right or wrong of this. But I would appreciate hearing your views on it. The legislation would generally prohibit or delay farm foreclosure actions. That's the legislation that is being pushed very emotionally, and with some gusto, by some Members of Congress.

What is your opinion of that?

Mr. **Naylor**. Mr. Chairman, I think the Farmers Home Administration currently has all the necessary programs and tools to do a very effective job in supporting American agriculture and the problems that it has been faced with. I think the record clearly shows that we have made proper and adequate use of them and that we have been able to virtually shut down and eliminate many of the foreclosure questions that have been raised.

Last year, in 1982, there were, out of our 270,000 loans, only a little over 800 foreclosures. And the total number of producers, and keep in mind, we were credit of last resort lender, out of the 270,000 borrowers we had, we had 7,000, for a variety of reasons, that left farming, including those that were involved in foreclosures.

At that same time, as a massive effort of using the discretionary authority we had available, particularly at the direction of the President and Secretary Block, we were able to provide special assistance that allowed producers to stay in operation, those that had any reasonable chance of success, over 42,000 borrowers, which I think indicates our concern and interest in seeing that job was done.

Now with direct relation to your question on the legislation, the proposed legislation, both the Senate version, S. 24, and the House version, H.R. 1190, in our judgment, are very unsound pieces of legislation. They are not in the best interest of the American farming community or the American farmer. And that is a view which is shared by many in the various farm organizations, commodity groups, and within the financial community. A mandatory moratorium or deferment, in whatever form you present it, will not improve or solve the problems being faced by the agricultural community today and, in many respects, will be counterproductive to the best interest of most producers.

We must remember that as a base, only 12 percent of the farming community that borrows would be affected by the proposed legislation; 88 percent would received no benefit whatsoever and, in fact, the benefit of the one might offset and be counterproductive to those that are getting their funds from the commercial sectors.

In addition to that, there are a number of additional provisions which reinstitute programs which the General Accounting Office and the Inspector General's Office I think have made quite clear, as we have observed repeatedly, that the programs not only were unsuccessful, but were counterproductive to the best interest of individual farmers. Specifically, I am addressing the economic emergency program, on which there have been numerous reports from the General Accounting Office and the Inspector General's Office that this particular program did not serve its purpose well and led, in many cases, to extreme overextension of credit well beyond any possible hope for recovery for an individual producer and has led to unnecessary financial stress for many producers.

If you look at the total package from both legislative branches in total, I would only have to say that we are disappointed that we have been unable to persuade many of the members that have looked at this that this legislation simply is not good legislation. And we have indicated that if it were to pass in its current form or be brought forward, that the Secretary and myself would very seriously have to consider recommending to the President a veto of such legislation were it to be brought forward.

Senator **Jepsen**. Along those lines, would you say that your policies with regard to extension of credit and servicing the debt, have been more lenient or less lenient or about the same as commercial attitudes and procedures have been?

Mr. **Naylor**. I would have to say on a commercial standard that our standards have been substantially more lenient. And the reason they're more lenient is the very basic philosophy under which we work is that of a supervised credit operation. In other words, we're simply not extending the loan, but part of our obligation goes beyond that to provide counseling and support to that producer that is under our lending program. And because of that, we have historically, and continue to do so, been more lenient in many of our provisos than the commercial or farm credit system can or should be doing.

We found that it has worked well and we have found that, in the end, we do get our lands repaid and we are able to help our producers get back on their feet.

I think it's significant that in this last year, the measure that the commercial sector goes by, how much did you have to write off in actual loan losses? Now it was only $25 million out of our $23 to $24 billion farm portfolio. Now that's a record that any commercial lender would like to have. It is indicative that supervised credit, in my mind, does work and that if we will stay with our producers and help them and support them and use the authorities available to us, that in the end, everyone benefits—producer and the taxpayer.

Senator **Jepsen**. Well, 800 foreclosures out of 270,000 loans, is considerably less than somewhere in the neighborhood of a small fraction of 1 percent. Industrywide nationwide, how would this compare with like loans in the commercial area? More? Less? About the same?

Mr. **Naylor**. Well, actually, Mr. Chairman, although we do have the representative from the farm credit system here, our actual number of legal foreclosures is slightly below the number, I think, experienced there. We don't have an accurate count in the commercial system that I am aware of because they don't summarize that data on a national basis.

All of us have seen foreclosures at a higher level than we would like to see them. But as an absolute number, they are still quite small. And we are finding that in most cases, particularly where we're working together and I, again, commend the commercial farm credit system, that we have worked very well together and through this trying period in agriculture. We have been able, by working jointly, to keep virtually any producer who has any possible hope of success and recovery in business, to give them the opportunity to operate their way through this particular period of time.

Senator **Jepsen**. On the basis of the information that you have given here, and on the basis of that information—I emphasize that—in your opinion, as objective as you can be, would you say that the harsh criticism of the noncompassionate look by your administration at farm mortgages is fair? It doesn't seem to me, from the statistics you've given here and on the basis of these facts, that that criticism is warranted. Does that seem like a reasonable statement?

Mr. **Naylor**. Mr. Chairman, I certainly appreciate the emotion and concern that surrounds this issue and I appreciate the effect that the media can have on it in presenting it in the way that they have.

But I do feel that it's an unfair criticism and I think the record clearing shows that it is. We would not have extended the time, the effort, the work that is required by our local office management to provide the assistance we did for some 42,000 of our borrowers to keep them in business. It would have been much easier to do otherwise. But we care about them; our people in the field care about them. And I think we were successful. I think the very fact that we were able to do so much for so many of our borrowers was indicative of our concern and compassion for the problem that they were faced with.

Senator **Jepsen**. One more question, and here I put on the other hat that I wear, and that is as chairman of the Soil Conservation Water Resource Subcommittee on the Agriculture Committee of the Senate.

I would ask for your comments, please, on your feeling with regard to——

[A loud pounding noise interrupted the hearing at this point.]

Senator **Jepsen**. I would advise the panel that we have instructed the superintendant's office to stop their pounding. They said that they would do so immediately—but evidently, the message hasn't gotten to them yet—and we're coming down the home stretch with our Senate rollcall bells. So we should be able to proceed pretty soon without these interruptions.

Your opinion, please, on tying soil conservation measures of some sort or some level with Government financed loans.

[Rollcall bells interrupted the hearing at this point.]

Mr. **Naylor**. Mr. Chairman, you're right. This is the loudest set of bells that I have heard. [Laughter.]

Senator **Jepsen**. The question again is your opinion on integrating soil conservation activities in some measure, with loans, and as a requirement for loans? There's a lot of talk about that. What's your feeling about it?

Mr. **Naylor**. Mr. Chairman, as we both know, the subject of what is generally called cross-compliance has always been a highly controversial one. We have strongly encouraged both the use of crop insurance and the use of soil conservation practices as a condition of loans where it was appropriate to do so on a voluntary basis. We have looked at the option of making it mandatory. I'm not sure at this point that that yet is the fully appropriate course of action to take, but we certainly intend to continue on reviewing these cases as we develop them to strongly encourage and, in some cases, require both the use of proper soil conservation practice and the use of Federal crop insurance.

Senator **Jepsen**. When you say "some cases you are required," are you legally on solid ground doing that? Do we need a statute? Do we need laws to provide for that? How do you handle that? Have you ever been taken to court on it?

Mr. **Naylor**. We have not been taken to court on the specific issue, but I think, as a principle within the lending industry, loan conditions are well established. You can set a condition of loan that certain practices are followed in order for that loan to have a reasonable expectation of success. And that's the basis on which we approach this at this time.

Senator **Jepsen**. I thank you. I have no further questions. Is there anyone on the panel that has any comment on what the Secretary has said, or any question for the Secretary before he leaves?

[No response.]

Senator **Jepsen**. There are none?

[No response.]

Senator **Jepsen**. All right, thank you.

Mr. **Naylor**. Mr. Chairman, thank you for your courtesy and again, it's been my privilege to be with you today. I look forward to looking at your full report on this hearing.

Senator **Jepsen**. Thank you, Mr. Naylor. Now, Marvin Duncan, vice president and economist, Federal Reserve Bank of Kansas City.

You may proceed, sir, as you wish.

STATEMENT OF MARVIN DUNCAN, VICE PRESIDENT AND ECONOMIST, FEDERAL RESERVE BANK OF KANSAS CITY

Mr. **Duncan**. Mr. Chairman, I am pleased to address the distinguished members of the Joint Economics Committee today on the subject of financing agriculture in the 1980's.

This Nation's agricultural sector has grown rapidly in recent years, in both its productive capacity and the value of the assets it controls. Credit to finance that capital investment and production inputs has been central to that growth. Hence, it is fitting that this committee give attention to the issue of financing agriculture as part of its discussion of farm policy alternatives.

America's farmers appear to be on the verge of an economic recovery after the most serious and prolonged period of financial stress in more than 40 years. The 1983 improvement in farm income will, however, come largely as a result of unprecedented farm program expenditures. Yet, despite massive costs to the public, the effect on farm income has, and apparently will be, quite modest.

Thus, many students of farm policy would agree that old policy prescriptions are no longer working well.

My presentation this morning will be excerpted from my prepared statement I have provided to the committee, and I will discuss the credit markets and credit availability to farmers, government credit provision, related farm policy issues, and broader economic issues that interact with food and fiber policy.

Public policymakers have historically been concerned with credit availability to farmers. In the past when rural credit markets were relatively isolated from national financial markets, and before the emergence of the farm credit system as a major national lender to agriculture, such concerns may have been justified. As a consequence, a variety of Federal programs were put in place to assure farmers access to credit. For most of the previous decade, indeed, much of the post-World War II period, institutional arrangements in agricultuure have tended to provide farm credit at rates that were often below national money market rates.

Thus, agriculture may have used more credit than it would have if the price of that credit had more fully reflected national financial market conditions.

Moreover, financial market conditions during the 1970's both in and out of agriculture tended to encourage firms to use leverage in their growth strategies. Institutional arrangements on anticipated price inflation and expansionary economic policies combined to hold real interest rates in credit markets to near zero during the 1970's. As a result it is not surprising that agricultural debt levels grew so rapidly during that period.

Currently, the ongoing institutional and regulatory changes in financial markets and the return of greater price stability in the economy have largely eliminated the isolation of rural financial markets. As a result, loan funds at rural banks now tend to be priced much nearer national financial market rates.

But this also means that rural borrowers have access to broader sources of funds. These changes have, on balance, improved the performance of U.S. and rural financial markets. It can now be reasonably argued that agriculture has access to very efficient markets and can acquire all the credit that it can profitably use at competitive rates.

For a number of reasons, credit demand by farmers may not grow as rapidly in the decade ahead as in the previous decade. The volatility of commodity prices inherent in supplying a world market for food and fiber appears likely to result in greater credit rationing on the part of farmers themselves. Lower rates of price inflation will also slow growth in farm asset values and input costs. If real interest rates were higher than those typical of the past couple of decades, that would likely weigh against highly leveraged farm business growth strategies.

Nonetheless, access to credit and the terms on which credit is made available remain important agricultural policy tools. As a result of the improved efficiency of credit markets, policymakers have an opportunity to chart an equitable and a market-oriented credit policy for farmers. They also have an opportunity to direct the allocation of Government credit to uses which provide a high return to both the farm and to the national economies.

National policymakers have tended to support traditional farm credit programs and these programs have typically been directed toward farmers. And there was justification for that. But changing circumstances may require some redirection of Government credit extensions within agriculture. There are a number of areas in which Government credit would be useful. For example, financing export sales of farm products is an area in which public credit extension could yield a high return in the 1980's. Export sales of food and fiber will continue to be limited by the inability of food deficit countries to exercise effective market demand.

Additionally, credit extensions appear to be helpful in meeting competition by other sellers in world markets, as well as being less confrontational than many subsidy mechanisms. Thus, it appears appropriate to explore ways of using credit and credit guarantee programs to improve demand for U.S. farm exports. For example, the revolving export credit program should be funded. Additionally, credit guarantee programs could be expanded.

Moreover, adequate funding for an intermediate term credit program could fill an important need in providing an impetus to agricultural market development and hence, demand for U.S. farm exports.

To facilitate market development, it is necessary, in my judgment, to provide multiyear credit and food aid commitments to world agricultural customers and to aid recipients. Among credit programs to agriculture, the Commodity Credit Corporation commodity loan program has a long-standing record of success in aiding farmers in marketing their products. Hence, no action should be taken, I believe, that would jeopardize that program.

In view of the public interest in preserving the Nation's agricultural production capacity, properly designed programs to assist in financing soil conservation would appear to be another productive use of Government credit. Government credit might be used in financing long-term improvements in land management, such as terracing or the return of land to a soil-conserving use.

Large-scale emergency lending programs by the Farmers Home Administration grew rapidly during the past decade, as Secretary Naylor indicated. But I agree with this assessment that they have been largely ineffective in assisting farmers to return their businesses to financial health.

Hence, I am dubious of the usefulness of such programs in the future. However, there will continue to be a need for Farmers

Home Administration lending to some new entrants into agriculture. Certainly most persons starting farming will bring capital with them or will have family assistance. But without Government credit, some persons would likely be denied entrance into farming.

In my prepared statement, I have commented on a number of other major policy issues in agriculture that have direct and indirect relationships to the financing of agriculture. For example, in my view, it is likely that the U.S. farm sector will continue to have excess capacity at prices acceptable to farmers for several years into the future. Hence, some type of multiyear land retirement program seems to be needed. Perhaps such a program should be linked to conservation practices on so-called fragile lands that are experiencing high rates of soil erosion.

On the demand side of the equation, a number of long-term market development efforts need to be pursued to build farm export markets. Among them are a clear and unequivocal statement of intent to be a reliable supplier in export markets. The need for adequate funding of credit and credit guarantee programs I've addressed, and food aid to economic development, aid to developing countries can, in fact, be an important tool in building long-term U.S. export markets.

One might also consider an export PIK program.

Now dependence on world markets, of course, carries with it price and income volatility as a natural consequence. While it may be politically unacceptable and economically inefficient to underwrite all the down-side risk in farm prices and income, some public policies may be needed to limit that risk.

Thus, some limited form of target pricing has some appeal. But public budget exposure under such a system would likely have to be much more tightly defined. And, indeed, there may be questions related to the economic efficiency and equity of target price programs and deficiency payments as they are currently structured.

Development of price or income insurance programs that could be offered to farmers on a voluntary basis and that make use of commodity markets, the futures market, the commodity options markets, seem to me to be very interesting and have some potential uses that may be very important to farmers in limiting the down-side risk in agricultural prices. Certainly, an expanded Federal crop insurance program is also very appealing. Farmers could then select the kind and the amount of risk that they wished to insure against.

Finally, if U.S. farmers are to use price signals to appropriately adjust their output, and if they are to remain competitive suppliers in world markets, it is extremely important that they make management decisions on the basis of world market prices and not on the basis of Government price signals that may at times be in excess of those market prices.

Hence, Government price supports for major farm commodities that trade in world markets, in my judgment, should be adjusted to near world market prices.

Let me comment on some broader economic issues. Farmers have placed great importance on the development of legislative solutions to commodity price and farm income programs. However, the growing interdependence of the farm sector with the broader U.S. economy and sector's increased dependence on export markets now mean that broader economic policies have become at least as important to farmers as farm policy.

For those farmers who rely on agricultural production as their primary source of income, broader economic policies are important determinants of growth in farm product demand, determinants of production cost increases and determinants of the cost of capital.

However, most discussion related to farm policy concentrates on those commercial farmers and for the more than 1½ million small farmers who are now primarily dependent on off-farm jobs and income for their livelihood—indeed, some would argue that that figure may be as high as 1.8 million—farm programs are relatively unimportant. The policies that are important to these small farmers are those that provide broad ranging and sustainable economic growth that can stimulate job formation in an atmosphere of relative price stability and rural development programs that provide employment opportunities near their farm residences.

Permit me to summarize. The integration of the food and fiber sector into the broader United States and world economies seems to call for more market-oriented policy initiatives. Accommodating such policy changes while balancing the legitimate interests of farmers, consumers, and others affected directly by agriculture will require creative policy formulation. The policy initiatives that I have suggested would be expected to support the growth of U.S. farm product sales at home and abroad and to limit the adverse impact of downward price and production volatility in U.S. agriculture. In such an environment, when coupled with efficient national and rural credit markets, the financing needs of U.S. agriculture should be well served into the 1980's.

Finally, sustainable growth in the United States economy and the economies of its trading partners is fundamental to finding complementary solutions to problems addressed by food and fiber policy. In many respects, policy initiatives that improve broader economic performance will prove at least as important in determining farm income and the adequacy of financing agriculture as what is done with food and fiber policy.

I appreciate the opportunity to appear before this committee and to discuss future farm policy options, and particularly the financing of agriculture in the 1980's.

Thank you, very much.

[The prepared statement of Mr. Duncan follows:]

PREPARED STATEMENT OF MARVIN DUNCAN

My name is Marvin Duncan. I am a vice president and economist with the Federal Reserve Bank of Kansas City. I am pleased to address the distinguished members of the Joint Economic Committee's Agriculture Subcommittee on "Financing Agriculture In The 1980s."

This Nation's agricultural sector has grown rapidly in recent years, in both its productive capacity and the value of the assets it controls. Credit to finance capital investment and production inputs has been central to that growth. Because farmers have become large users of borrowed capital to supplement their own resources in farming, because biological production cycles in agriculture make the timing of credit availability so important, and because the price and the terms of credit to farmers are important mechanisms by which farmers are linked to broader economic policies, it is fitting that this Committee give attention to the issue of financing agriculture in the 1980s as a part of its discussion of farm policy alternatives.

America's farmers appear to be on the verge of an economic recovery after the most serious and prolonged period of financial stress in more than 40 years. Net farm income is expected to improve only modestly this year, perhaps to the $21-$24 billion range. But that will still not bring farm profitability anywhere near the $32.3 billion earned in 1979. The rather modest improvement in income will be due to three factors: slightly higher livestock cash receipts, improved crop prices, and reduced expenditures for nonfarm production inputs. The last two factors can be attributed to the Payment-In-Kind (PIK) program.

The 1983 improvement in farm income will come largely as a result of unprecedented farm program expenditures, which apart from PIK are expected to reach $21 billion this year. Depending how PIK is handled in government accounting, another $12 billion could be added to the cost. By way of

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The views expressed herein are solely those of the author and do not necessarily represent the views of the Federal Reserve Bank of Kansas City or of the Federal Reserve System.

comparison, government farm program expenditures amounted to only $11.7 billion in 1982 and $4.0 billion in 1981. Yet, despite massive costs to the public, the effect on farm income has been quite modest. Indeed, hopes for significant and sustainable improvement in farm income continue to rest on improved performance in the economies of the United States and its trading partner countries.

The recent period of income stress has also spawned some serious financial problems for farmers. Farmers either leaving farming or selling part of their capital assets as a result of financial stress represent a substantially larger proportion of all farmers than would be expected under more normal economic conditions. The PIK program, moreover, will apparently increase short-term financial pressures on livestock producers as feed costs rise and on agribusinesses as planted acres are cut back.

Thus, many students of farm policy would agree that old policy prescriptions are no longer working well. It is widely recognized that while the PIK program provides a short-term boost to farm income and asset values, it does not address the underlying problems facing farmers. Rather, it serves the useful purpose of providing some breathing space that farmers, agribusinesses, and policymakers can use in addressing these underlying problems. In that context, this series of hearings is appropriately timed.

In examining the issue of financing agriculture in the 1980s, this paper first reviews the historical patterns of credit use by farmers as well as the credit problems that have emerged to confront agriculture. Next, the efficiency of rural credit markets is reviewed. And finally, a discussion is provided of the policy options for the Nation's food and fiber sector and the implications of these options for financing agriculture.

HISTORICAL CREDIT USE PATTERNS

Farmers have increasingly relied on debt financing over the past decade. Total farm debt outstanding has risen 310 percent since 1970 (Table 1). Real estate debt has risen 275 percent and nonreal estate 354 percent. During much of that period, however, farm asset values rose even faster, holding the farm sector's debt-to-asset ratio around 16 to 17 percent (Table 2). Most of the increase in farm asset values was due to escalating farm real estate values. From 1970 to 1981, when values peaked, national farmland values increased at an average annual rate of 13.4 percent--well ahead of the 7.2 percent average annual increase in the GNP Implicit Price Deflator.

It is only in the last two years that the sector's debt-to-asset ratio began the rapid climb that has taken it to 20.3 percent at the beginning of 1983, the highest since the data series began in 1940. Though that ratio still indicates substantial financial resilience in the farm sector, the picture is less benign for those farmers producing most of the Nation's food and fiber. The U.S. Department of Agriculture (USDA) has estimated that as many as 45 percent of the farm operators with annual cash sales of $200,000 or more--the operators that account for half of all cash receipts--carry debt-to-asset ratios of over 40 percent. That is about twice the ratio for the farm sector as a whole. About 60 percent of all farm debt is owed by farmers with debt-to-asset ratios of more than 40 percent. Farmers with ratios of 70 percent or more carry 30 percent of all farm debt.

The financial problems of farmers have developed for a number of reasons. First, the farm recession drove farm income and farm cash flow well below expected levels. Second, interest rates paid by farmers escalated sharply as a result of rising price inflation and changes in rural financial markets.

Table 1
FARM REAL ESTATE DEBT

		Percent of Total				
January 1.	Total Dollar Amount ($Billions)	Federal Land Banks	Life Insurance	Banks	Farmers Home Administration	Individuals and Others
1970	29.2	22.9	19.7	12.1	7.8	37.5
1975	44.6	30.0	14.1	13.4	7.2	35.3
1980	85.4	34.7	14.3	10.1	8.3	32.6
1981	95.5	37.6	13.5	9.2	8.1	31.6
1982	105.6	41.3	12.4	7.9	8.3	30.1
1983*	109.5	43.1	11.7	7.7	8.3	29.2

FARM NONREAL ESTATE DEBT

		Percent of Total					
January 1.	Total Dollar Amount ($Billions)	Banks	Production Credit Assoc.	Federal Intermediate Credit Banks	Farmers Home Administration	Individuals and Others	Commodity Credit Corp.
1970	23.8	43.3	18.9	.9	3.3	22.4	11.2
1975	37.0	49.3	25.6	1.0	2.8	20.4	.9
1980	80.4	38.6	22.4	.8	11.2	20.7	6.3
1981	86.4	36.5	22.7	.9	13.6	20.5	5.8
1982	96.1	34.3	21.9	.9	15.0	19.6	8.3
1983*	108.0	33.5	18.6	.8	13.6	18.1	15.4

TOTAL FARM DEBT
January 1
(In $Billions)

1970	1975	1980	1981	1982	1983
53	81.6	165.8	181.9	201.7	217.5

Source: For 1970; Agricultural Finance Outlook, November 1979, Economics, Statistics and Cooperative Service, USDA (1979). For 1975-83; Agricultural Finance Outlook and Situation, Economic Research Service, USDA (1982).
*1983 data are preliminary.

Table 2
BALANCE SHEET OF THE FARMING SECTOR

(January 1)

	1970	1975	1980	1981	1982	1983*
	$Billions					
ASSETS						
Real Estate Assets	215.8	368.5	755.9	830.0	823.8	789.1
Nonreal Estate Assets	76.3	117.6	208.8	218.9	223.2	233.5
Total Physical Assets	292.1	486.1	964.7	1048.9	1047.0	1022.6
Total Financial Assets	22.8	31.4	40.1	42.2	44.8	47.4
Total Farm Assets	314.9	517.5	1004.8	1091.0	1091.8	1070.0
CLAIMS						
Real Estate Debt	29.2	46.3	85.4	95.5	105.6	109.5
Nonreal Estate Debt to:						
CCC	2.7	.3	5.1	5.0	8.0	15.4
Others	21.1	35.2	75.3	81.5	88.1	92.6
Total Liabilities	53.0	81.8	165.8	182.0	201.7	217.5
Proprietors' Equity	261.9	435.7	839.0	909.0	890.1	852.5
Total Claims	314.9	517.5	1004.8	1091.0	1091.8	1070.0
Debt to Asset Ratio	16.8	15.8	16.5	16.7	18.5	20.3

Source: For 1970 and 1975; Agricultural Finance Outlook, November 1979, Economics, Statistics and Cooperative Service, USDA (1979). For 1980-83; Agricultural Finance Outlook and Situation, December 1982, Economic Research Service, USDA (1982).
*1983 data are preliminary.

These factors have resulted in declining farmland values. From peak values in early 1981, U.S. farm real estate values have declined by a little more than 6 percent. In the Tenth Federal Reserve District, our agricultural credit surveys indicate nonirrigated cropland values as of April 1, 1983, have fallen about 17 percent from their peak value. The decline in asset values quickly brought to a head the problems of farmers who had grown accustomed to periodic refinancing of operating and term debt using escalating land values to provide collateral.

By 1982, reduced cash flow, the high real cost of carrying debt, and declining land values had combined to markedly boost farm loan delinquency rates. Last year, loan repayment rates dropped sharply across the Farm Belt. Demand for loan extensions and renewals escalated, as well. In the Tenth Federal Reserve District, for example, our surveys show the proportion of farmers who left farming for all reasons during the fourth quarter of 1982 and the first quarter of 1983 was about 65 percent higher than bankers considered normal. The proportion of farmers continuing in business, but selling capital assets to relieve financial stress, was about three times greater than bankers considered normal. Nonetheless, anecdotal evidence suggests that only about 12-15 percent of the Tenth District and the Nation's farmers are having very serious financial problems.

Farm Credit System (FCS) data suggest a similar, though perhaps not as striking, pattern of loan delinquencies and forced exits from farming across the Nation. At the end of 1982, 2.2 percent of Production Credit Association and Federal Land Bank borrowers were in foreclosure. And at the end of the first quarter of 1983, 10.3 percent of their loans were delinquent. Even though 35 percent of Farmers Home Administration (FmHA) borrowers were delinquent on March 31, foreclosure action was being taken by the agency against only 0.5 percent of all FmHA farm borrowers (excluding rural housing loans).

These higher rates of farm failures must be viewed in an historical context, however. Farm failures in the 1970s were held to unusually low levels through expanded government credit programs such as the Livestock Emergency Credit and the Economic Emergency Credit programs of the FmHA. Yet, despite good intentions and the $7.7 billion in total credit obligated under these two programs, it is difficult to find success stories from the programs. Bankers indicate that with few exceptions recipients of those loans are once more in trouble and account for a significant proportion of the current business failures and partial liquidations among U.S. farmers. Thus, it seems appropriate to restrain new extensions of credit under the programs and to refocus Federal credit programs. There is a point at which new extensions of credit, regardless how easy the terms, are simply not in the best interest of the borrower. Beyond some point, further extension of credit likely means the farmer will continue in business until depleting all his equity and will leave farming with no wealth. Indeed, it was the widespread substitution of credit for income during the past several years that is responsible for the current unfortunate plight of many financially troubled farmers.

EFFICIENCY OF CREDIT MARKETS

Public policymakers historically have been concerned with credit availability for farmers. In the past, when rural credit markets were relatively isolated from national financial markets, and before the emergence of the FCS as a major national lender to agriculture, such concerns may have been justified. As a consequence, a variety of Federal programs were put into place to assure farmers access to credit.

For most of the previous decade--indeed, much of the post-World War II period--institutional arrangements in agriculture have tended to provide farm credit at rates that were often below national money market rates. Until 1978, FmHA lending for real estate was at below market rates, and economic emergency loan program funds were available far below market rates at a maximum of 3 percent. Commodity Credit Corporation (CCC) lending was also at subsidized rates until the mid-1970s. The FCS, using average cost pricing in an environment of rising interest rates, also priced their loans below the marginal cost of funds, although variable interest rate loans tended to limit the differential over time.

Thus, agriculture may have used more credit than it would have if the price of that credit had more accurately reflected national financial market conditions. Moreover, financial market conditions during the 1970s, both in and out of agriculture, tended to encourage firms to use leverage in their growth strategies. Institutional arrangements, unanticipated price inflation, and expansionary economic policies combined to hold real interest rates in credit markets near zero during the 1970s. As a result, it is not surprising that agricultural debt levels grew so rapidly during that period.

In the past, agricultural banks typically raised loanable funds and made loans in the same local geographic market. During periods of restraint in monetary policy, interest rates charged by those banks were usually lower than national market rates. Conversely, rural rates did not fall as low as national market rates during periods of ease in monetary policy. The recent institutional and regulatory changes in financial markets and the return of greater price stability in the economy, however, have largely eliminated the isolation of rural financial markets. As a result, loan funds at rural banks now tend to be priced much nearer national financial market rates.

Looking to the future, a number of factors may lead to a credit market environment marked by a continuation of high real interest rates. Among those factors are large demands on capital markets to finance public budget deficits, credit demands by the private sector to modernize and enlarge the U.S. industrial base, and the ongoing deregulation and internationalization of U.S. financial markets. Thus, market forces may weigh against increased leverage and in favor of increased use of internally and externally generated equity funds in farm business growth.

FARM POLICY ALTERNATIVES

The Committee has asked that I present my views on financing agriculture in the 1980s as well as on the interaction between the financing of agriculture and the other farm policy issues under discussion. This section of the paper outlines recommended policy options to address the issues raised and emphasizes the linkage between improved performance for the broader economy and improved performance for agriculture.

Credit Policy

Access to credit and the terms on which credit is made available remain important agricultural policy tools. As a result of the improved efficiency of credit markets, policymakers have an opportunity to chart an equitable and market oriented credit policy for farmers. They also have an opportunity to direct the allocation of government credit to uses with a high return, both to the farm and to the national economies.

It can be reasonably argued that agriculture now has access to very efficient credit markets and can acquire all the credit it can profitably use at competitive rates. Though it is probably true that agency status enables the FCS to raise loanable funds at somewhat lower cost than would otherwise be the case, it does not seem prudent to tamper with that status at this time.

To do so currently would probably not materially reduce agricultural credit demands and could disrupt the servicing of agriculture's credit needs at a time when farmers can ill afford such instability.

With efficient credit markets, one can expect that agriculture's credit needs will be well served in the future. Indeed, if a significant part of the current U.S. farm surplus results from overinvestment in agriculture and excess capacity to produce at prices acceptable to farmers, policymakers should carefully consider any further investment with credit at below market cost or on soft terms. While such action may appear to benefit hard pressed farmers at the time, experience indicates the benefit may be at best transitory. Furthermore, it may be an inefficient allocation of credit resources and may also discriminate against producers that have obtained credit on normal commercial terms. To the extent that such credit expands total farm output beyond what can be marketed at acceptable prices, it simply creates another public policy problem.

Financing export sales of farm products is an area in which public credit extension could yield a high return in the 1980s. Export sales of food and fiber will continue to be limited by the inability of food deficit countries to exercise effective market demand. Additionally, credit extensions appear to be helpful in meeting competition by other sellers in world markets, as well as being less confrontational than many subsidy mechanisms. Thus, it seems appropriate to explore ways of using credit and credit guarantee programs to improve demand for U.S. farm exports in world markets. For example, the revolving export credit program should be funded. Additionally, credit guarantee programs could be expanded. Moreover, adequate funding for an intermediate-term credit program could fill an important need. To facilitate market development, it is important to provide multi-year credit and food aid commitments to world agricultural customers and aid recipients.

In view of the public interest in preserving the Nation's agricultural production capability, properly designed programs to assist in financing soil conservation would appear to be another productive use for government credit. About 94 million acres of U.S. farmland are losing five or more tons of topsoil per acre through erosion each year. Government credit might be used in financing long-term improvements in land management, such as terraces or the return of land to a soil conserving use. Subsidized interest rates and loan forgiveness could be used to encourage participation in conservation programs. Conversely, full loan repayment could be required from farmers who converted land back out of the subsidized conservation practice within a specified time period.

Despite the efficiency of agricultural credit markets, the need will remain for public extension of credit to a proportion of new entrants into agriculture. The average age of America's farmers in the last Agricultural Census was 50 years, suggesting a substantial proportion of them could retire by the end of this decade. Farm consolidation could reduce the number of replacement farmers needed and many entrants will likely receive family assistance in starting their farm businesses. Additionally, market forces may influence more farmers to leave part of their assets invested in agriculture upon retiring--thus reducing initial capital requirements for entrants into farming. Nonetheless, some entrants will need FmHA credit for equipment, land, and operating expenses. FmHA lending for those purposes currently amounts to about $1.9 billion a year. While I have earlier questioned the usefulness of the FmHA large scale economic emergency lending programs, I do support a limited and carefully targeted credit program to provide assistance to new entrants into farming.

The Commodity Credit Corporation commodity loan program has a longstanding record of success in aiding farmers in marketing their products. Hence, no action should be taken that would jeopardize that program.

A variety of other credit programs could be proposed. Although many might have merit, federal budget pressures likely mean all future government spending and lending will undergo close scrutiny. It is important, then, to allocate government assistance to activities with the highest payoff to the American public.

Credit demand by farmers may not grow as rapidly in the decade ahead as in the previous decade. The volatility in commodity prices inherent in supplying a world market for food and fiber appears likely to result in greater credit rationing on the part of farmers themselves. Lower rates of price inflation will also slow growth in farm asset values and input costs. If real interest rates were higher than those typical of the past couple of decades, that would likely weigh against highly leveraged farm business growth strategies. However, credit demand to support farm export sales and to facilitate soil conservation practices could grow more rapidly in the 1980s than previously.

Price Signals

Improved farm prices and income are dependent on demand growth both in the domestic economy and in trading partner economies. Because trading partner countries often have more rapid population growth than the United States--and higher propensities to spend additional income on food--export markets are particularly important. Farmers and their agribusiness partners in the food and fiber industry have invested billions of dollars in preparing to sell in export markets and cannot comfortably turn their backs on such an opportunity. Yet, U.S. commodity prices above world market prices limit the ability of farmers to compete in those markets.

CCC loan rates that are above world market prices work to the disadvantage of farmers in three ways. First, farmers are encouraged to produce more than world markets can accept without causing market prices to fall. Second, high U.S. prices tend to encourage expanded production elsewhere in the world, adding to the competition faced by U.S. farmers. Finally, U.S. farmers capitalize those government price signals into their land values and equipment costs, raising their cost of production and reducing their competitiveness in world markets.

Government price signals above world prices are largely the result of legislated price increases linked to adjustments for inflation. More appropriately I believe, CCC loan rates for major farm commodities traded in world commerce should be adjusted to market clearing levels, that is, world prices.

Some provision for carrying stocks, as in the Farmer Owned Reserve, is probably needed to ensure that the United States is a reliable supplier to its customers. Reserve stocks add a measure of stability to commodity prices as well. Clearly, the reserve should have a maximum capacity related to the quantity needed to make sure the United States can supply its domestic and international markets. It should not, however, be used as a major income support device as in the recent past. Moreover, the United States should seek to avoid carrying, in its own stocks, the world's grain reserves--attempting instead to convince other major producer and consumer countries to share in carrying the inventory.

Export Markets

It would not be reasonable to fashion a public policy for U.S. food and fiber without substantial attention to export markets. Production from about two out of every five harvested acres in the United States has been destined for the export market. Moreover, every additional billion dollars of farm exports creates about 28-30,000 new jobs in the U.S. economy. Farm exports are also an important factor in reducing the U.S. balance of trade deficit.

The United States should take a number of measures to improve its position in world agricultural trade. Trade policy should be developed that is conducive to expanded exports of farm and other products. Included in the policy should be a strong and unequivocal statement that the United States will be a reliable supplier of farm products in world markets. Language to that effect should be included in the Export Administration Act now before the Congress. To do otherwise may continue to identify this country as an unreliable supplier of farm products. Efforts to reduce unfair trade practices and trading partner restraints against importing U.S. farm products should also be pursued with vigor and prudence. Such efforts should be continuing and long term. Moreover, expectations of results must be realistic.

An increased long-term effort should be made to develop foreign markets. Food aid and public sector/private sector market development projects are important parts of that effort. Long-term economic aid to developing countries is helpful in developing markets for our farm products, as well. Competitively priced transportation of products to customer countries also needs to be assured. As noted earlier, credit and credit guarantee programs are very important. Perhaps an export PIK program should be considered, as well. Finally, broader U.S. economic policies can either enhance or inhibit the competitiveness of U.S. products in world markets by affecting relative rates of economic growth across countries, the U.S. inflation rate, and the international exchange value of the dollar.

Supply Control

In the near term--and perhaps throughout the 1980s--farmers appear to have significant excess capacity to produce. Hence, some type of multi-year land retirement program appears to be needed. While it seems unlikely that as much land needs be retired as in the 1960s, when 58 million acres--at the peak--were withdrawn from production, it seems important that a longer term program be considered. Land retirement could be linked to soil conservation efforts--returning to conserving uses crop lands most susceptible to soil erosion. Such conservation use could include a return to grass or to forest. Some procedure should also be devised, of course, for returning land to cultivation if demand later warranted. Land retirement programs, however, should not become a means to abruptly increase the nation's supply of beef--thus harming cattle producers. Additionally, it seems prudent to give the Secretary of Agriculture discretionary authority to implement short-term voluntary and paid land diversion programs as a means for providing better balance of market supply with demand. While I would be reluctant to see mandatory procedures for short-term land retirement written into legislation, the Secretary of Agriculture could be encouraged to consider such action when conditions warrant.

Farm Income Maintenance

Inherent in the policy initiatives I have suggested are both opportunities and risks. The initiatives are consistent with growing markets for U.S. farm products, but dependence on market forces carries with it price and income volatility. While it may be politically unacceptable for the government to underwrite all the downside risk in farm prices and income, some public policies may be necessary to limit that risk.

It might be more practical to provide some income protection than to support product prices at levels which may sometimes be above market clearing levels. Thus, some form of a target price system with direct payments to farmers is appealing. But the budget exposure under such a system will probably have to be much more tightly defined in future legislation. Perhaps the program's income maintenance and production level linkage should be reevaluated. The current system of deficiency payments for cooperating producers on nearly all production of covered commodities can be questioned on the basis of both efficiency and equity.

Insurance mechanisms appear to hold much promise for underwriting farm income risk. Some adjustments in cost and benefit levels, as well as increased coverage, for the Federal Crop Insurance program deserves attention from the Congress. Continued partial subsidy of premiums would likely be necessary to attract farmer support. Congress should also investigate the potential usefulness of an income or product price insurance program. Such a program might include the use of commodity options and could perhaps be offered by private insurers. If feasible, the program would offer farmers another means of protecting themselves from the downside of commodity price cycles. Of course, insurance programs need widespread participation to work. Farmers would likely purchase insurance only if the government were not already providing it at no cost--as in FmHA and Agricultural Stabilization and Conservation Service (ASCS) administered emergency/disaster programs providing credit and transfer payments.

Broader Policy Considerations

Farmers have placed great importance on development of legislative solutions to commodity price and farm income problems. However, the growing interdependence of the farm sector with the broader U.S. economy and the sector's increased dependence on export markets now mean that broader economic policies have become at least as important to farmers as farm policy.

For those farmers that rely on agricultural production as their primary source of income, broader economic policies are important determinants of growth in farm product demand, production cost increases, and the cost of capital. However, for the more than 1.5 million small farmers that are now primarily dependent on off-farm jobs and income for their livelihood, farm programs are relatively unimportant. What is important to these small farmers is broad ranging economic growth that can stimulate job formation and rural development programs which provide employment opportunities near their farm residences. Thus, policies that improve the performance of the entire U.S. economy are important to the welfare of all the Nation's farmers.

CONCLUSION

In summary, the integration of the food and fiber sector into the broader United States and world economies seems to call for more market oriented policy initiatives. Accommodating such policy changes while balancing the legitimate interests of farmers, consumers, and others affected directly by agriculture will require creative policy formulation.

The policy initiatives suggested in this testimony would be expected to support the growth of U.S. farm product sales--at home and abroad--and to limit the adverse impact of downward price and production volatility in U.S. agriculture. This would be accomplished in the context of an increasingly market oriented policy--consistent with limited government intervention. In such an environment, when coupled with efficient national and rural credit markets, the financing needs of U.S. agriculture should be well served during the 1980s.

Sustainable growth in the United States' economy and the economies of its trading partners is fundamental to finding complementary solutions to problems addressed by food and fiber policy. In many respects, policy initiatives that improve broader economic performance will prove at least as important in determining farm income and the adequacy of financing agriculture as what is done with food and fiber policy.

Senator JEPSEN. Thank you, Mr. Duncan.

We'll now hear from George D. Irwin, Chief Economist, Farm Credit Administration.

You may proceed, sir, as you wish.

STATEMENT OF GEORGE D. IRWIN, CHIEF ECONOMIST, FARM CREDIT ADMINISTRATION

Mr. IRWIN. Mr. Chairman, I am pleased to have the opportunity to visit in this background hearing on the 1985 farm legislation. I am also appreciative that your Joint Economic Committee is recognizing the interrelationship between farm commodity legislation and particularly general financial economy.

I am going to highlight some testimony here and primarily focus on the future aspects of the issues.

The Federal Farm Credit Board, which is our top governing body, has a policy that we speak out only on credit and credit-related issues; hence, I'm going to concentrate on two major areas. The first is the kinds of impacts general farm policy has on farm credit programs. Second, I want to discuss some specific concerns we have about the Farm Credit System's continuing access to financial markets. That's an area that has implications for agricultural credit for the farm sector and even for the performance of general farm policy.

Of course, the general farm policy area provides the operating environment in which these farm credit programs function.

Let me begin by reviewing a little the function of the Farm Credit Administration. We're an independent Federal executive agency and we're responsible for supervising and examining and regulating the privately owned cooperative Farm Credit System. Congress created this System starting in 1917 and the objective was to insure that the farm sector would have equal access to financial markets in both good and bad economic times. Funds for the lending operations are raised entirely by sale of securities in private financial markets. All capitalization of the Farm Credit System is by borrowers and there is even no federally appropriated funding in the supervisory agency of the Farm Credit Administration.

I want to just touch a bit on the farm policy environment. I agree totally with Marvin Duncan that the agriculture that we have has become totally interdependent with both the U.S. and world economies. This is creating a lot greater volatility in farm earnings. Now we continue to have an objective, a great blessing, really, for the American public and the whole world in having ample food supply in this country. The farm policy certainly needs to insure that this continues.

On the other hand, we have to balance that concern of scarcity by consumers against the concern of overabundance and depressed prices for producers. It seems to me that Government policies are needed in this area to level out some of the price volatility.

The primary question is how much of this risk of downside price risk should be assumed via Government programs? It seems to us that the Government clearly has a role in maybe three major areas—cushioning the impact of major disasters, absorbing the effect of major policy actions if they're taken for nonfarm reasons, and in promoting agricultural exports.

We have to recognize that there are some limits also. To some extent, anyway, increased Federal protection simply helps induce farmers to use greater financial leverage. It's our impression that the environment ought to be set up to allow them to succeed or fail within a risk protection of clearly defined Federal policies. It is particularly important that the Government policies offer a steadying hand and not contribute to the volatility that they are created to control. It's also important that these not destroy the incentives for improving efficiency because that's what's made agriculture the most productive in the world.

I think there are several dimensions of the farm to nonfarm relationship that are very, very important in formulating general policy. Again, Marvin Duncan has covered these, so let me just abbreviate a bit.

Farmers are relatively small business units dealing with much larger firms both in the general economy and directly in the firms that supply inputs and market products. Legislation somehow needs to address the bargaining position of farmers in this sort of an environment. We, of course, have an interest in agricultural cooperatives and believe that they have something to offer in this area.

Second, the reliance on nonfarm income is very, very important for a large segment of those 2.4 million farmers. Further, there is an extremely uneven disbursement of farm income among those people. Therefore, commodity policy interacts and performs in this complex environment and must recognize that it impacts differently on different groups.

Third, there is intensive nonfarm competition, particularly for land and water resources for farmers. It seems that farm programs cannot always create high enough farm prices so that the farmers can compete with nonfarm users for some of these resources.

Finally, in this interaction area, entry into farming is always of great interest, particularly when economic times are good, but there is a major conflict that farm policy has to deal with. That is, between entry via intergenerational succession on the farm versus new entry from outsiders. That subject can generate a lot of emotion.

Let me now turn a little bit about the relationship between credit and farm policy. I view credit as a facilitator of economic, political, and social forces that are being pressed on us on the farm businesses. In general, credit is not the cause of the kinds of changes that are going on in the farm sector, but it may be the medium by which people accomplish the changes that are needed. It's really not the job of a credit institution to impose its judgment on that of a borrower on how they adapt to these forces, except when the safety of the loan gets involved. So such things as participation in general farm programs are ordinarily at the borrower's discretion, leaving him or her the right, to succeed or fail.

Government, itself, is involved in credit in two ways—the indirect way through the loan and payment aspects of price support programs and directly through Farmer Home programs and the storage loan programs of commodity credit.

I think it's appropriate to review, any time one is studying new legislation, whether adequate attention is given to the credit aspects of price support programs. They certainly have a major impact on loan volume of institutional lenders. They are frequently direct substitutes for borrowing from commercial lenders.

In the area of Farmers Home programs, it seems that they need to be designed, administered, understood, and accepted as temporary devices for any individual borrower. They are entry opportunities for high risk individuals. They are temporary bridges across uncontrollable situations for others.

It seems to me that they need minimum size standards. They need incentives for people to graduate from those programs. They may need a limit on the number of times any one individual can go to the well.

In the area of guaranteed programs of Government, they need to be designed to avoid creating some counterproductive initiatives for commercial lenders generally, only I would suggest that in an era when we have severe constraints on Federal spending, it's important that Farmers Home ought to focus on the beginning and lower income farmers while using insurance and commodity programs for the larger producers.

Now I'm ready to turn to the subject of the Farm Credit System access to financial markets.

It seems to us that intelligent use of debt capital is critical if agriculture is going to continue to be a major contributor to the goals that we are seeking in our national economic policies. The keystones of a primary credit system that might create the mood for a healthy agriculture are healthy commercial banks and a healthy private Fram Credit System.

We think we need both. We think that both need to be allowed to serve their primary purpose, providing credit, without the burden of being used as vehicles for other major objectives.

The specific congressional mandate that the Farm Credit System operates under requires it to make credit available to the full range of agricultural producers in all areas of the country an in all phases of an economic cycle. This insures that farmers who are pretty geographically scattered, who operate on a small scale, who operate in a cyclic industry, have equal access to financial markets and do not suffer disproportionately, especially during a recession.

This ability to serve all who need credit for a constructive purpose and can pay a market interest rate depends critically on access to financial markets. To state it simply, reliable lending cannot be divorced from reliable funding. The System must be able to sell whatever amount of security is required to meet borrower requirements in both good times and especially in bad times.

Now the Congress has provided a number of unique characteristics that help insure that financial markets are going to remain receptive to whatever amount of Farm Credit securities need to be sold. Together, this set of characteristics is often referred to as agency status.

These characteristics assist, along with the strength of the Farm Credit System itself, in preserving the System's sound capitalization, its impeccable payment record to investors, its recognized skill in lending, and its broad diversification. And the result of this combination is that the System is able to sell large volumes of securities at favorable interest rates, even in austere economic times.

I would have to express some concern that some recent proposals that called for the elimination of these agency attributes on the grounds that they are providing farmers too good an access to financial markets. They would limit the access on the grounds that it constitutes a Federal intrusion into private capital markets.

Now it seems to me just a bit ironic that a program designed by the Congress to correct for inadequate access to funds would now face a proposal of this type. The question emerges in your mind, has Farm Credit been too successful? I think not. The entire U.S. economy and its financial system have vastly changed since the Farm Credit System was created and, of course, it's continuing to evolve. But I think we still have the basic disparity between relatively small farm businesses and relatively large businesses in other sectors when you're comparing businesses of equal high capital intensity.

We still have differences in accessibility to financial centers just due to the necessary geographic location of farming activity. Without a Farm Credit System we would not have equal access and the System couldn't serve its mission.

Now much of the discussion on this topic has tended to center on changes in interest rates, but, in my judgment, that misses the main point. The most important concern about agency status is the ability to sell the volume of securities required to meet farm financing needs. There just isn't any precedence in the financial markets for an organization to carry out such a large mission without this status. So, in our view, the unique combination of public and private attributes needs to be preserved.

Senator **Jepsen**. May I interrupt you there?

Mr. **Irwin**. Yes, sir.

Senator **Jepsen**. This was just recently released in the Grace report, which I'm sure you're familiar with. They made the report to the President, recommending a process designed to encourage quasi-Government agencies such as the Farm Credit System, to seek full private status, which is what you were alluding to.

I just wanted to make sure that I undersood. It will save discussion later on. In your opinion it is really not possible to accomplish the job of providing the broad farm credit that is needed without the status being kept as a status quo?

Mr. **Irwin**. That's right, Senator Jepsen. I don't believe that they address the mission of the Farm Credit System. They address the objective of doing something on the financial market side of things. I'll speak on that in just a minute a little bit more, if you like.

There's another aspect of these kinds of proposals and some of them would pick away at agency attributes one at a time. I think it has become clear that the ability to sell large quantities of securities is based partly on this agency status and it consists of a whole bundle of attributes. None of us can be absolutely sure what removal of any one of these attributes would do to the financial market's perception, which is part of the support for the System funding.

We all know that financial markets move on expectations, and removal of any one of these attributes could trigger a change in expectations. It's a little like if you're a carpenter and you decide to remove some wall studs, maybe one at a time, from under a roof. You can't really be sure which one is critical, or if they all are, until you have done something and it's too late. The engineer would say, for long-term safety, they're all needed.

The possible consequence of these kinds of changes—that is, loss of quantity access to financial markets—would be a catastrophe for the farm sector in the view of the analysis that we have done. Thus, we think that this is an area to be approached only with extreme caution and then only after very, very careful study.

Clearly, what we have is an objective of some that would remove agency status and it's in conflict with another basic objective specified by the Congress. That latter objective is a mission assigned to the Farm Credit System in supporting an agriculture whose basic unit is the family farm. It seems to us that this latter objective has to be given very considerable weight.

I think the Office of Management and Budget made my point pretty well 1 year ago in the budget backup documents when they noted that certain Federal activities, such as Federal Deposit Insurance, should not be subject to budget limitations because if you did so you'd destroy the basic purpose of the program.

I think the case may be even more compelling for the Farm Credit System, which is privately owned and doesn't impose any burden on the Federal budget to begin with. A recent GSA report recognized the System as predominantly private, as did the Senate Budget Committee's temporary Subcommittee on Federal Credit.

So we think it makes little sense to place limitations that would destroy the program mission of a Federal program and it also makes little sense to remove agency status if that would deny the Farm Credit System the ability to accomplish the mission that Congress has given it.

Mr. Chairman, that concludes my formal testimony. I appreciate being here and I'll be glad to respond to any further questions. Thank you.

[The prepared statement of Mr. Irwin follows:]

PREPARED STATEMENT OF GEORGE D. IRWIN

Mr. Chairman, I am pleased to have the opportunity to appear before you as part of your background hearings on 1985 farm legislation. We in the Farm Credit Administration appreciate the fact that the Joint Economic Committee recognizes the impact that farm commodity legislation has on financial issues.

My testimony today will address two major areas. First, I will review with you the kinds of impacts general farm policy can have on Farm Credit programs. Second, I will discuss some specific concerns we have about the Farm Credit System's access to financial markets. This is an area that has important implications for Farm Credit programs, and ultimately on the farm sector. It should be noted that this access affects performance of general farm policy. And the opposite is also true. The dimensions of general farm policy provide much of the operating environment in which farm credit programs function.

Let me begin by reviewing the function of Farm Credit Administration (FCA). We are an independent Federal executive agency, charged with responsibility for supervision, examination, and regulation of the privately owned cooperative Farm Credit System (FCS). The Congress created this system, beginning in 1917, to ensure that the farm sector would have equal access to financial markets in both good and bad economic times. Funds for lending operations are raised entirely through the sale of securities in private financial markets, all capitalization of the System is provided by borrowers, and no federally appropriated funds are used in the supervisory operations of FCA.

THE FARM POLICY ENVIRONMENT

We are in an era in which agriculture has become totally interdependent with the U.S. economy and even the world economy. Pressures from all sorts of economic events create the potential for greater volatility in farm earnings. Ample food remains one of the great blessings to the American public and to the rest of the world, and farm policy needs to ensure that this continues. On the other hand, we must conclude that legislation needs to be balanced, treating both the concern over possible scarcity to consumers and the concern over possible overabundance and depressed prices to producers.

Government policies are needed to help to level out some of the price volatility for farmers. How much of the risk should the general public assume via Government programs? Government clearly has a role to play in cushioning the impact of major disasters, in absorbing the effects of major policy actions taken for nonfarm reasons, and in promoting agricultural exports. To some extent, however, increased Federal protection simply induces farmers to use greater financial leverage. They should be allowed to succeed or fail, within the risk protection afforded by clearly defined Federal policies. It is important that such policies offer a steadying hand and not contribute to the volatility they are created to control. It is also important that such policies not destroy the incentives for improving efficiency, which have made U.S. agriculture the most productive in the world. Government programs must not correct or bail out individual management errors of farmers, but deal only with major disasters.

Several other dimensions of the farm-nonfarm relationship are significant in formulating general farm policy:

1. Most farmers rely heavily on the agribusiness complex, which is composed of much larger firms, for supplying inputs and marketing products. How can farmers improve their bargaining position with these ultimate suppliers or buyers? In our view, a legislative environment encouraging healthy cooperatives is part of the answer, helping ensure that farmers carry equal weight in the market with their larger counterparts at the buying and selling ends.

2. Farmers have a much greater reliance on nonfarm income, and this income comes from a variety of sources -- from nonfarm wages and investments, and from pensions. This kind of interdependence will continue for large numbers of farmers and must be a factor in setting general farm policy. Average farm income is no longer a satisfactory measure of total well-being for many of the smaller farms, and the uneven dispersion of farm income has implications for the performance of commodity programs.

3. Farmers compete increasingly with nonfarmers for access to land and water. This makes the implementation of farm policy subject to the nonfarm land and water markets in many areas of the country.

4. Agricultural land values rose markedly during the general inflation of the 1970s, for both farm and nonfarm reasons. Entry via land ownership is becoming more difficult. More and more, we must recognize that there will be fewer entry opportunities, and we must ask, "Who should have the opportunity to farm?" Government

assistance programs need to balance intergenerational succession and new entry, while recognizing there is a minimum viable size.

CREDIT AND GENERAL FARM POLICY

I view credit as a facilitator of those changes that are being pressed on us by more basic economic, social, and political forces that directly affect the farm businesses of borrowers. In general, credit is not the cause of such changes, but the medium by which they are accomplished. Nor is it the job of a credit institution to impose its judgment on that of a borrower as he or she adapts to these forces, except when safety of the loan is involved. Thus, participation in general farm programs is ordinarily at the borrower's discretion. This leaves the entrepreneur the right to succeed or fail. It also means that sound overall credit may exist even when a borrower makes an unsound credit decision.

The Government itself is involved in farm credit in two ways: indirectly, through operation of the loan and payment aspects of price-support programs, and directly through lending of Farmer's Home Administration and Commodity Credit Corporation. It is appropriate to ask whether adequate attention is given to the credit aspects of price-support programs; certainly they have major impacts on the loan volume of institutional lenders. CCC loans frequently become direct substitutes for credit from lenders. I would also suggest that FmHA programs need to be designed, administered, understood, and accepted as temporary devices for any individual borrower. They can provide entry opportunities for high-risk individuals, and temporary bridges for handling uncontrollable natural or economic disasters. FmHA loan programs need minimum-size standards, graduation incentives, and limits on the number of times they can be used by any individual. Guarantee programs have to be designed carefully to avoid creating counterproductive incentives for commercial lenders. In an era of restraints on Federal spending, it is important that FmHA credit priorities focus on beginning and lower-income farmers. Insurance and commodity programs are more important for the larger producers.

Farm Credit System Access to Financial Markets

Intelligent use of debt capital is critical if agriculture is to be a major contributor to goals that we seek in our national economic policies -- productivity, ample food that is reasonably priced, balanced exports, and meeting humanitarian world food objectives. The keystones of the primary credit system for a healthy agriculture are healthy commercial banks and a healthy private Farm Credit System.

We need both commercial banks and the System in order to best serve farm borrowers. Both need to be allowed to serve their primary purpose, without the burden of being used as vehicles for other objectives. The congressional mandate of the System requires that it make credit available to the full range of agricultural producers, in all areas of the country, during all phases of the economic cycle. This requirement ensures that farmers, who are more geographically scattered and operate on a smaller scale in a more cyclic industry than many other producers, have equal access to financing, and do not suffer disproportionately during recession.

This ability to serve all who need credit for a constructive purpose and who can pay a market interest rate depends critically on access to the national financial markets. Reliable lending cannot be divorced from reliable funding. The System must be able to sell whatever amount of securities is required to meet borrower requirements, in both good times and bad. This is the mandate given the System by Congress.

The Congress has provided a number of unique characteristics that help ensure that financial markets will remain receptive to the amount of FCS securities that need to be sold. Taken together, this set of characteristics is commonly referred to as "agency status." These, along with the strength the System has built for itself -- the sound capitalization, impeccable repayment record, recognized skill in agricultural lending, and broad diversification of loan risks within agriculture -- enable the System to sell large volumes of securities at favorable interest rates, even in times of adverse economic conditions.

I am concerned that some recent proposals have called for the elimination of these agency attributes, on the grounds that they provide farmers "too good" an access to financial markets. These proposals would limit such access on the grounds that it constitutes a Federal intrusion in private capital markets.

I find it ironic that a program designed by the Congress to correct for inadequate access to funds would now face such a proposal. Has Farm

Credit been too successful? I think not. It is evident the entire U.S. economy and its financial system have vastly changed since the 1916-33 period when the Farm Credit System evolved. But we still have the basic disparity between relatively small farm businesses and relatively large businesses in other sectors of the economy that have similar, high capital intensity. We still have differences in accessibility of financial centers. Without a Farm Credit System, farmers would not have equal access. And without the attributes necessary to tap the financial markets, the System could not serve its mission.

The most important concern about losing agency status is that the System could not sell the volume of securities required to finance farmer needs. There is no precedent in financial markets for an organization to carry out such a large mission without this status. The unique public-private relationship, combining agency attributes and sound system management, needs to be preserved.

I am also concerned about proposals that would pick away at agency attributes, one at a time. The ability to sell large quantities of securities is based partly on agency status, which consists of the whole bundle of attributes. No one can be absolutely sure what the removal of any one of them would do to the market perception that supports the System funding. We all know that financial markets move on expectations, and removal of any one attribute could trigger a change in expectations. It's like removing wall studs, one at a time, from under a roof. One can seldom be sure which stud is critical, or if they all are, until it's too late. However, for the long-term safety, the engineer would claim that they all are critical. The possible consequence -- loss of quantity access to financial markets — would be a grave catastrophe for the farm sector. It is an area to be approached only with extreme caution, and then only after very careful study.

Clearly, the objective of those who would remove agency status conflicts directly with another basic objective, the mission assigned the System in supporting an agriculture whose basic unit is the family farm. I would suggest that this latter objective should continue to prevail. The Office of Management and Budget made my point well in the 1983 budget document, when it noted that certain activities that are directly Federal, such as Federal deposit insurance, should not be subjected to budget limitations, because to do so would destroy the basic purpose of the program. The case is even more compelling for the FCS, which is privately owned and does not impose a burden on the Federal budget. A recent GSA report recognized the system as "predominantly private," as does the report of the Senate Budget Committee's Temporary Subcommittee on Federal Credit. Just as it makes little sense to place limitations that would destroy a Federal program's missions, it also makes little sense to remove existing agency status attributes granted by Federal law if that would deny the FCS the ability to accomplish its mission, as Congress intends.

Mr. Chairman, that concludes my formal testimony. Thank you for the opportunity to appear before this hearing. I will be happy to answer any questions that you may have.

Senator **Jepsen**. Mr. Olson, please proceed, as you wish.

STATEMENT OF THOMAS H. OLSON, PRESIDENT, LISCO STATE BANK, LISCO, NEBR., AND CHAIRMAN, AGRICULTURE-RURAL AMERICA COMMITTEE, INDEPENDENT BANKERS ASSOCIATION OF AMERICA

Mr. **Olson**. I am Thomas Olson, president of the Lisco State Bank in Lisco, Nebr., and I'm also chairman of the Agriculture-Rural America Committee of the Independent Bankers Association of America.

I'd like to thank you for inviting me to represent our association and also the commercial banking industry in this important series of hearings.

Our membership of some 7,000 banks includes some 2,500 banks which have at least 20 percent of their loan portfolio composed of agriculture loans. Rural commercial banks extend credit to farmers and ranchers, primarily for working capital, and also for the financing of equipment and livestock.

On January 1 of 1983, commercial banks remained still the largest supplier of such nonreal estate credit to agriculture with slightly over 34 percent of the market share. Commercial banks also held 7.7 percent of real estate farm debt, as was pointed out earlier by Mr. Naylor.

Thus far, during the 1980's, the primary shift in the market share among lenders of nonreal estate farm debt is a substantial increase in direct credit by FmHA and CCC with corresponding reductions in short- and intermediate-term debt held by commercial banks and PCA's.

On January 1 of 1983, the Farmers Home Administration and CCC held an estimated 27.2 percent of the total farm debt. Unfortunately, this shift to USDA derives mostly from the serious recession in agriculture. Rural commercial banks are highly liquid in most cases with abnormally low loan-to-deposit ratios and can be expected to increase their share of agriculture loan volume when farm income, cash flows, and the demand for commercial credit recover.

However, if during this period of weak export market surpluses of commodities should be allowed to again get out of control with plummeting farm prices as the effect of PIK on the market diminishes, one must realistically expect pressures on the Farmers Home Administration to substitute additional credit for inadequate farm income.

Consequently, the problems of financing agriculture, at least from our perspective, are largely external to credit policy, per se, and involve the broader questions of adequate farm income and cash flows.

As you pointed out earlier, Senator, in your opening remarks, the farm customers are certainly major consumers in U.S. economy. In 1981, farmers purchased $81.5 billion of products, labor and financing of nonfarm origin, including $13.7 billion of fertilizer and pesticides, $11.4 billion of machinery, $9.3 billion of energy, and $19.7 billion of interest on debt. Farmers purchased another $31.8

billion of products such as livestock and feed with farm origin and therefore, farm purchases totalled $113.3 billion in 1981.

What's ahead for the mid-1980's? In regard to farm income and cash flows, I'm optimistic that U.S. agriculture is equipped for thriving export markets. In the long-term based upon an efficient, independent producer structure, favorable soil and climate, extensive technology development, and transfer systems and dependable institutions for capital formation.

At a meeting that our association held here in Washington, D.C. on May 2 and 3, a meeting of our committee, we adopted requirements for a sustained agricultural recovery. We addressed the subject of export markets and I would like to review this most important area.

For any sustainable farm recovery, U.S. farm export volume must be returned to an upward curve since the United States is dependent upon foreign markets to absorb the steady marginal increases in the productivity of U.S. farm land. The agricultural export marketing effort should include the following:

One, an unrestrained access of U.S. farm commodities to world markets in order to rebuild confidence in the United States as a dependable supplier, including enabling agreements and policies. Such agreements and policies should include a multiyear agriculture trade agreement with the Soviet Union and a reserve policy for basic commodities adequate to support the United States' role as a dependable export supplier of farm products.

Two, an aggressive U.S. trade negotiating stance supported by export incentives to counter export subsidies by other nations and groups of nations in order to recover and maintain U.S. market share in world trade.

Three, greater U.S. leadership in devoting multinational attention to the volatility and range of exchange rate differentials which looks toward curbing excessive variations that hamper agricultural trade.

Four, increased cooperative Government-industry export market promotion activities and the maintenance of U.S. food assistance and congressional sales at adequate levels.

And five, economic policy efforts to enhance and continue recovery of the economics of the United States and abroad to commodities, including special attention to the causes of high real interest rates.

Although optimistic for thriving exports in the long-term, I believe that costly mistakes might be avoided and policy needs best served if Congress and the administration pay attention to realists who are projecting only weak growth for U.S. agriculture exports perhaps for several years ahead.

Again, in the interest of time, I would like to divert from my prepared statement, of course, which you have, and just briefly summarize the main sources of decline in U.S. agriculture exports since 1980, which include a weak world economy resulting in a possible decline in world demand for the first time in 1983. Foreign debts of many developing countries have curtailed their ability to import food from the United States. And of course, the strength of the U.S. dollar has offset any trade advantages of lower prices. And U.S.

grain exports have met much more competition from other exporting countries.

My prepared statement also addresses the tight cash flow situation of farm and ranch operators which has been alluded to earlier in several of the testimonies this morning. Most of my customers have not had a positive cash flow in the last 3 years. Furthermore, land equities have been deteriorating further, reducing their ability to procure financing.

The PIK program has, or will, provide mostly just short-term relief. Furthermore, the latest USDA cost of production study released in February of 1983 indicates that production costs for the grains leave basically no room for reductions in Federal price support levels without jeopardizing the solvency of many competent farm producers who do not hold their farm land virtually free of debt.

Even those farm operators with strong equity positions in farm land and other capital assets may be unwilling to operate for long at neutral or negative cash flows if their capital assets are not appreciating.

Further complicating this situation is the fact, as demonstrated in 1982, that the Federal price support loan level will not establish the market floor without a high degree of participation in Federal programs. The financial situation in agriculture, therefore, remains very tight, despite the PIK program and the options that are actually available to improve farm capital flows and creditworthiness without opening gross inequities among farm producers are quite limited.

In sum, there is no solid grounds for projecting that expanding export markets will allow U.S. agriculture and agriculture policy to avoid some very tough choices to cope with the depressed farm situation. The need, therefore, is decisions now, enabling more efficient management of farm cash flow and income policies. Once those decisions are made, the stabilization policies must be competently administered so that the major slippage from program objectives does not undercut the effectiveness of the programs.

We felt it encumbent upon our own organization to make specific recommendations in this important area. To do so, we convened the Independent Bankers Association officers and our 20-member agriculture rural committee in Kansas City yesterday for an all-day meeting on farm policy, and we have adopted the following set of recommendations to Congress and to this administration.

For wheat, corn/sorghum and other basic commodities as warranted, adopt a firm target for year-end stock carryover levels designed to fulfill market demand without building surpluses. Give the Secretary of Agriculture discretionary new authority temporarily to, first, pay export price incentives through private exporters; second, require acreage or volume controls based on majority referendum of the producers themselves; and third, provide that the Secretary shall use these or other existing authorities to achieve the stock carry-over objectives temporarily while export markets are weak and shall implement and administer them effectively to achieve their full intended effect.

Retain the farmer-held reserve to be administered in conjunction with greater emphasis upon annual production controls to cope with surplus production capacity and so that farmers are not encouraged to plant for the reserve.

Maintain Federal price support loans at adequate levels based upon costs of production and including also a return to the farm land for efficient farm operators. A more extensive background discussion and explanation of this set of recommendations is attached to my prepared statement as attachment B.

Mr. Chairman, we offer this as a pragmatic package of recommendations which should be consistent with responsible budget policy and yet, should enable thousands of independent farmers who lack an adequate farm land equity cushion to survive this period until export markets recover.

This concludes my statement and I would welcome any questions that you may have.

[The prepared statement of Mr. Olson, together with attachments, follows:]

PREPARED STATEMENT OF THOMAS H. OLSON

Mr. Chairman and Members of the Joint Economic Committee: I am Thomas Olson, President of the Lisco State Bank in Lisco, Nebraska, and Chairman of the Agriculture-Rural America Committee of the Independent Bankers Association of America. Thank you for inviting me to represent the IBAA in this important series of hearings.

The IBAA's membership of some 7,000 banks includes about 2,500 banks which have at least 20% of their loan portfolio composed of agricultural loans. Rural commercial banks extend credit to farmers and ranchers primarily for working capital and the financing of equipment and livestock. On January 1, 1983, commercial banks remained the largest supplier of such non-real estate credit to agriculture, with slightly over 34% market share. Commercial banks also held 7.7% of real estate farm debt.

Thus far during the 1980s, the primary shift in market share among lenders of non-real estate farm debt is a substantial increase in direct credit by FmHA and CCC, with corresponding reductions in short and intermediate term debt held by commercial banks and PCAs. On January 1, 1983, the FmHA and CCC held an estimated 27.2% of total farm debt of this type. However, this shift to USDA credit derives mostly from the serious recession in agriculture. Rural commercial banks are highly liquid in most cases, with abnormally low loan-to-deposit ratios, and can be expected to increase their share of agricultural loan volume when farm income, cash flows, and the demand for commercial credit recover.

However, if during this period of weak export markets surpluses of commodities should be allowed to again get out of control with plummeting farm prices as the effect of PIK on the market diminishes, one must realistically expect pressures on the Farmers Home Administration to substitute additional credit for inadequate farm income.

Consequently, the problems of financing agriculture at least from our perspective are largely external to credit policy per se and involve the broader questions of adequate farm income and cash flows. ①

Adequate farm income and cash flows should be a real concern to all of us, because farmers are major consumers in the U.S. economy. In 1981, farmers purchased $81.5 billion of products, labor and financing of non-farm origin, including $13.7 billion of fertilizer and pesticides, $11.4 billion of machinery, $9.3 billion of energy, and $19.7 billion of interest on debt. Farmers purchased another $31.8 billion of products such as livestock and feed with farm origin, and therefore farm purchases totalled $113.3 billion in 1981.

What's Ahead for the Mid-1980s?

In regard to farm income and cash flows, I am optimistic that U.S. agriculture is equipped for thriving export markets in the long term--based upon our efficient independent producer structure, favorable soil and climate, extensive technology development and transfer systems, and dependable institutions for capital formation. I have attached to my testimony (Attachment A) a paper on "Requirements for a Sustained Agricultural Recovery" containing recommendations to promote farm export marketing, which was adopted by IBAA's Agriculture-Rural Committee on May 2-3 and was distributed in meetings with members of Congress at that time.

Although optimistic for thriving exports in the long term, I believe that costly mistakes might be avoided--and policy needs best served--if Congress and the Administration pay attention to the realists who are projecting only weak growth for U.S. agricultural exports perhaps for several years ahead.

Unfortunately, we are reaping the harvest of agricultural export restrictions applied by Presidents Nixon, Ford, Carter, and Reagan; a U.S. dollar which is overvalued relative to the currencies of many countries who are major importers of U.S. farm products; and, most especially, a global recession which will continue to depress imports of U.S. commodities. Developing country markets, in particular, are likely to be affected adversely far beyond the time when many economies are recovering.

Regarding developing countries, a number of whom were the fastest growing markets for U.S. commodities during the 1970s, their extremely heavy debt burden should be a major concern to agricultural leaders. During the latter part of the 1970s, the time period was extended for U.S. farm export volume to continue to grow by recycling as debt the capital extracted from developing economies by high-priced OPEC oil. In addition, an unusually large volume of debt was extended to Mexico and certain other oil producing countries to accelerate their growth and development. The developing countries as a whole increased their public and private debt from $109.4 billion in 1973 to $529 billion in 1982, at which time their annual debt servicing costs alone reached $95 billion.

Eight of these countries--Mexico, South Korea, Egypt, Venezuela, Brazil, Peru, Poland, and Romania--with total external debt in 1982 of $298 billion, were among the 25 leading importing nations for U.S. agricultural products in 1981 when the value of U.S. farm exports peaked. At best, recovery of such countries from the recession and from their debt load will greatly lag economic recovery elsewhere in the world, adversely affecting their reinstatement as growing commercial agricultural importers from the U.S.

Although to a degree this weak exporting climate can be offset by proper actions, pressures will mount for the government to do more, not less, to carry the already-depressed agricultural economy through this period, and priority needs to be placed on pragmatic, efficiently-managed measures as they are administered now--which will largely determine what options are open in the so-called "post-PIK" period.

The Tight Cash-Flow Situation

Agricultural production by independent farm and ranch operators in the U.S. relies heavily upon debt financing, and non-real estate farm credit must be extended essentially on a cash flow basis. Such credit cannot be based primarily upon rather illiquid capital assets such as land. During the current recession, agricultural lenders and farm operators have had to substitute debt for cash returns to an unusual extent, but neither party can do business for long on that basis.

Unlike much of the 1970s when landowners could often reamortize real estate debt to free equity out of land to supplement current cash flow, this option tended to close as farmland and other capital assets ceased to appreciate. Farmland appreciation in real terms may remain nil for several more years, and further depreciation could occur if commodity price support loan rates and farm prices dropped as some have advocated.

The PIK program is expected to add $2 to $3 billion to net farm income in 1983, primarily by reducing costs incurred by producers, and will forestall liquidations during 1983 of many financially-vulnerable farm operators. But PIK is only buying time during a single year, and due to its high cost and laxity in administration, PIK will probably prove of rather limited use in positioning the farm economy for recovery unless weather conditions prove quite abnormal.

Furthermore, the latest USDA cost-of-production study released February 1983 indicates that production costs for the grains leave basically no room for reductions in Federal price support levels without jeopardizing the solvency of many competent farm producers who do not hold their farmland virtually free of debt. Even those farm operators with strong equity positions in farmland and other capital assets may be unwilling to operate for long at neutral or negative cash flows, if their capital assets are not appreciating. Further complicating this situation is the fact, as demonstrated in 1982, that the Federal price support loan level will not establish the market floor without a high degree of participation in Federal programs.

The financial situation in agriculture therefore remains very tight, despite the PIK program, and the options that are actually available to improve farm capital flows and credit worthiness without opening gross inequities among farm producers are quite limited.

Policy Recommendations

In sum, there is no solid grounds for projecting that expanding export markets will allow U.S. agriculture and agricultural policy to avoid some very tough choices to cope with the depressed farm situation. The need, therefore, is for decisions now, enabling more efficient management of farm cash flow and income policies. Once those decisions are made, the stabilization policies must be competently administered so that major slippage from program objectives does not undercut the effectiveness of the programs.

We felt it incumbent upon our own organization to make specific recommendations in this important area. To do so, we convened IBAA officers and our 20-member Agriculture-Rural Committee in Kansas City yesterday for an all-day meeting on farm policy, and adopted the following set of recommendations to Congress and the Administration:

1) For wheat, corn/sorghum, and for other basic commodities as warranted, adopt a firm target for year-end stock carryover levels designed to fulfill market demand without building surpluses.

2) Give the Secretary of Agriculture discretionary new authority temporarily to:

   a) pay export price incentives through private exporters;

   b) require acreage or volume controls based on a majority referendum of producers.

3) Provide that the Secretary shall use these or other existing authorities to achieve the stock carryover objectives temporarily while export markets are weak, and shall implement and administer them effectively to achieve their full intended effect.

4) Retain the farmer-held reserve, tc be administered in conjunction with greater emphasis upon annual production controls to cope with surplus production capacity and so that farmers are not encouraged to plant for the reserve.

5) Maintain Federal price support loans at adequate levels based upon costs of production, including a return to farmland, for efficient farm operators.

A more extensive background discussion and explanation of this set of recommendations is attached to this testimony (Attachment B).

Mr. Chairman, we offer this as a pragmatic package of recommendations which should be consistent with responsible budget policy and yet should enable thousands of independent farmers who lack an adequate farmland equity cushion to survive this period until export markets recover.

This concludes my prepared statement, and I would welcome any questions which Members of the Committee may wish to ask.

May 2-3, 1983

Attachment A

Requirements for a Sustained Agricultural Recovery

The payment-in-kind (PIK) program is succeeding in returning a cautious optimism to the agricultural sector of the economy, relieving for at least a few months some of the financial stress experienced by the agricultural production sector, and buying time for more lasting improvement to occur.

However, unless further steps occur to underwrite a real recovery, assuming normal weather, the market is likely to correct to lower commodity prices by this fall in order for corn and other basic commodities (which remain in surplus supply) to clear the market. As the March 21 cover story of Business Week pointed out, PIK "won't solve agriculture's long-term ills." (Business Week's feature story was entitled: "Why the Recovery May Skip the Farm Belt.") Furthermore, for hybrid seed, fertilizer, and other agricultural input firms the PIK program has increased their already severe financial problems in return for an uncertain future.

In addition, an agricultural recovery under present circumstances must be based to a larger extent upon annual cash flow rather than capital gains from farmland. Unlike much of the 1970s when farmland values were escalating over twice as fast as the general inflation rate, farming and ranching operations must now show a positive annual cash flow in order to remain economically healthy. This will require a level of farm prices adequate to cover production costs and yield an acceptable return on farm management and assets.

For this to occur, three areas in particular need attention:

I. Basic Agricultural Policy

The payment-in-kind (PIK) program is an ad hoc, stopgap effort, and as such it will prove inefficient and extremely costly to the taxpayer. Furthermore, the PIK program is demonstrating once again that independent farmers, livestock producers, community lending institutions, and other agricultural input firms cannot diversify enough to protect their operations against reoccuring depressed conditions in the farm economy. Although the PIK program was a necessary last resort under the deteriorated circumstances which had developed by 1983, attention must be given to a policy to succeed PIK which in a more efficient way can provide a measure of stability to agricultural production, marketing, and farm input operations.

Although the efforts to expand exports and the general economic programs discussed below are vitally important, it should be clear that a pragmatic agricultural policy per se will still be required for adequate returns to equity in production agriculture and in order to provide the stability necessary for the farm input industries to manage their businesses competently.

II. Recovery of Export Markets

For any sustainable farm recovery, U.S. farm export volume must be returned to an upward curve--since the United States is dependent upon foreign markets to absorb the steady marginal increases in the productivity of U.S. farmland.

The agricultural export marketing effort should include the following:

(1) Unrestrained access of U.S. farm commodities to world markets in order to rebuild confidence in the United States as a dependable supplier, including enabling agreements and policies. Such agreements and policies should include a multi-year agricultural trade agreement with the Soviet Union and a reserves policy for basic commodities adequate to support the United States' role as a dependable export supplier of farm products.

(2) An aggressive U.S. trade negotiating stance, supported by export incentives, to counter export subsidies by other nations and groups of nations in order to recover and maintain U.S. market shares in world trade.

(3) Greater U.S. leadership in devoting multi-national attention to the volatility and range of exchange rate differentials, which looks toward curbing excessive variations that hamper agricultural trade.

(4) Increased cooperative government-industry export market promotion activities, and the maintenance of U.S. food assistance and concessional sales at adequate levels.

(5) Economic policy efforts to enhance and continue recovery of the economies of the United States and abroad, to rebuild purchasing power for agricultural commodities--including special attention to the causes of high real interest rates.

III. Real Interest Rate Levels

Persistently high real interest rates are undermining the debt financing of agriculture and the economic recovery of other financially-strained nations which is necessary for expanding U.S. farm exports. In the United States, the average debt-to-asset ratio at the end of 1982 of all farm operators with debt (which excludes essentially small, part-time farmers) was over 35 percent. Due to high real interest rates and low realized returns with which to absord interest costs, when other factors are held constant, farmers whose debt-to-asset ratio exceeded 30 percent and who paid an average interest rate higher than 11 percent on their debt had a negative return to equity in 1982. Heavy financial strain will continue on a large segment of the U.S. farm and ranch community until real interest rates fall substantially or until prices received by farmers are consistently high enough to absorb the interest costs. Equally important, the cost of external debt servicing to many financially vulnerable nations who have been major markets for U.S. farm products is frustrating those nations' recovery and their return to a role as solid and growing agricultural trading partners with the United States.

Congressional representatives, especially those who represent agricultural states and areas, should work toward significant reductions in Federal budget deficits and other fiscal and monetary policies that can result in lower real interest rates in the United States and abroad.

In sum, a healthy and sustainable recovery in the agricultural sector of the economy requires both a new and more efficient agricultural policy per se and special emphasis on overall economic, monetary, and trade policy from agriculture's perspective.

Attachment B

Explanation of "A Pragmatic Agricultural Policy"

This explanation contains two sections: (1) a background preface; and (2) an item-by-item discussion of the specific policy proposal.

I. Preface

On a general level, a strong case can be made that the United States enjoys a comparative advantage in agricultural crop production in the world--deriving from favorable soil and climate, an efficient independent producer structure, extensive technology development and transfer systems, dependable institutions for capital formation, and other factors. This is a basis for optimism that U.S. agriculture is equipped for thriving export marketing in years ahead.

However, this U.S. comparative advantage resides especially with those well-established farmers to the extent that they own farmland debt-free and who can produce without necessarily returning full value to land as a production cost. Farm operators who rent or owe substantial farm mortgage debt have much less of an advantage. This latter category includes many of the more aggressive farm managers, since during the inflationary 1970's the market cues encouraged farmers to expand with leverage capital.

The difference between these categories of farm operators is indicated by the February 1983 USDA cost-of-production study. For example, for corn in 1981 the average U.S. production cost per bushel was: $2.24 total cost excluding land, $2.90 total cost including land at its acquisition cost, and $3.71 total cost including land at current value. The comparable per bushel production cost figures for wheat are: $4.00, $5.21, and $6.79. And for cotton per pound: $0.80, $0.90, and $0.99. 1/

Because of the large equity costs sunk into land, landowner producers will tend to produce at quite low market prices, and those whose land is free of debt can afford to do so provided they are being compensated by capital appreciation of the land or are willing to receive a lower return on their land equity.

1/ Cost of Producing Crops, Livestock, and Milk in the United States--1975-81, USDA (ERS), February 1983, pages 42,62,91.

This along with other factors (state trading by Canada, Argentina, and other countries, bilateral trade agreements which the Soviets have negotiated with several countries, the strength of the dollar and its role as a reserve currency, etc.) means that the United States is likely to remain in substantial degree a residual supplier in world markets as long as world trade is weakened by the global recession and heavy external debt load of many countries.

For these reasons, if the United States fails to maintain effective agricultural stabilization policies during the present period of weakened export markets, the likely result is that prices received by U.S. producers will be below the solvency level for a major percentage of competent, quality farm operators.

Another probable result would be the serious undermining of the equity position of financially strong producers who have substantial equity in farmland and other capital assets.

In the face of this problem, there is tremendous strain--some would say "crisis"--regarding agricultural policy. There is great difficulty in shifting from the inflationary 1970s to the current transition period of world recession, huge external debt load that many countries are carrying over from the 1970s, and unusually favorable weather for agricultural production. For one thing, the "voluntary" production control programs are proving not cost effective in the present climate.

Pragmatic steps can be taken to cope with this situation.

II. Discussion of Proposal

The following is an item-by-item discussion of "A Pragmatic Agricultural Policy".

1) For wheat, corn/sorghum and for other commodities as warranted, adopt a firm target for year-end stock carryover levels designed to fulfill market demand without building surpluses.

Agricultural policy should now be targeted to yearly supply carryover for the major basic commodities, because export markets are not dependable enough to allow the concept of multi-year "clearing" of markets through the grain reserve to be relied upon. During the 1970s when we appeared to be getting into an era of alternating short (but multiyear) periods of overproduction and relative scarcity, the multi-year reserve could be heavily relied upon as a stabilizer. However, for now at least, farmers are likely to "plant for the reserve" and build up chronic oversupply unless more effective year-to-year controls are imposed on stock buildup. Specific yearend carryover targets are therefore required.

2) Give the Secretary of Agriculture discretionary new authority temporarily to:

a) pay export price incentives through private exporters;

b) require acreage or volume controls based on a majority referendum of producers.

This would supplement existing authorities, so that the Secretary of Agriculture would have a range of legal means to respond to the situation.

The concept of imposing required production controls, based upon a producer referendum, of course has been used in the past. But that makes it neither good nor bad per se, since virtually no concept is new. "Payments-in-kind to producers for instance were used in the 1930s for cotton and in the 1960s for feed grains and cotton to reduce the cost of storing surpluses." 2/ Likewise, direct CCC export incentives were used prior to 1973 to render U.S.-produced commodities competitive in world trade in specific sales situations. Authority to use such incentives remains in the CCC Charter Act, but due to current budgeting procedures explicit new legislation would be desirable.

In combination, these two authorities could enable the USDA to: (1) curb production on a year-to-year basis economically at much lower Treasury cost; and (2) spend CCC funds to protect U.S. export market shares rather than as incentives to secure "voluntary" production cutbacks by U.S. producers.

3) Provide that the Secretary shall use these or other existing authorities to achieve the stock carryover objectives temporarily while export markets are weak, and shall implement and administer them effectively to achieve their full intended effect.

This conveys that the above measures would be used only temporarily on the premise that strong export markets will return and enable government involvement to be reduced. However, in the meantime, any Administration would be expected to carry out the measures fully and effectively so that they can achieve their intended results.

2/ "Payments-in-Kind: A Brief History", USDA (ERS), November 30, 1982, page 1.

4) Retain the farmer-held reserve, to be administered with greater emphasis upon annual production controls to cope with surplus production capacity and so that farmers are not encouraged to plant for the reserve.

The reserve would be maintained, but without premium price support loan rates, immediate entry, and other features that could lead to a chronic buildup of surpluses. In a sense, the reserve should function for the time being similar to an ad hoc "reseal" concept. The overloading of the reserve is a result of failure to curb production on a timely basis, rather than a result of shortcomings in the structure of the reserve per se.

5) Maintain Federal price support loans at adequate levels based upon costs of production (including a return to farmland) for efficient farm operators, and keep target price incentives fully in place unless and until alternative means for effectively coping with current overproduction problems are being put into place.

Minimum price support loan levels should continue to be established by law, at adequate levels as indicated.

Senator Jepsen. Thank you, Mr. Olson.

I welcome Senator Abdnor, who has just joined us. Do you have any opening comments before we go directly to questions, Senator.

Senator Abdnor. Thank you, Mr. Chairman. I'll skip my opening remarks and ask that my written opening statement be made a part of the record.

Senator Jepsen. Your written opening statement has been inserted in the hearing record.

Mr. Duncan, first of all, in your prepared statement you state, and I believe you're correct, that America's farmers appear to be on the verge of economic recovery. However, I must say that you are the first of 28 witnesses to suggest such an event.

Would you elaborate a little bit on it?

Mr. Duncan. Mr. Chairman, my remarks with regard to economic recovery in agriculture stem from my conviction that we are undergoing an economic recovery in the U.S. economy and that that recovery will prove to be an engine of economic activity that will support the recovery now begining to occur in the European industrialized countries and that in the context of sustaining that kind of economic recovery here, and including our trading partner countries, we will see an increase in demand for U.S. farm products in exports markets, particularly, but also here at home.

I am convinced that the recovery in the farm sector is dependent on improved performance in the U.S. economy and in the economies of its trading partners.

Senator Jepsen. Thank you, Mr. Duncan. Mr. Irwin, if I recall correctly, both of you alluded to the fact—or suggest—that perhaps the only role for the Farmers Home Administration in farm credit is to provide assistance to new entrants into farming.

Did I hear correctly?

Mr. Duncan. Mr. Chairman, my impression is that while it may be necessary to at times go beyond support of new entrants, that such support ought to be very carefully targeted and I would concur completely with Secretary Naylor's comments with regard to the need to constrain that type of credit provision, particularly in view of the recent experience of massive infusions of credit on soft terms to agricultural producers and the apparent lack of evidence that that infusion has been successful in accomplishing its objectives, that being returning those farm firms to financial health.

Senator **Jepsen**. Well, are you suggesting that the primary role for the Farmers Home Administration in farm credit should be to provide assistance to new entrants into farming?

Mr. **Duncan**. I would agree with that statement.

Senator **Jepsen**. OK.

Mr. **Duncan**. The primary role should be so.

Senator **Jepsen**. Mr. Irwin.

Mr. **Irwin**. I believe I stated about the same thing in my prepared statement, Senator. But I did indicate two general kinds of roles, the second one being the temporary bridge across these great economic chasms that we can find ourselves in as a result of dependence on the world economy.

Senator **Jepsen**. What do the bankers think about this, Mr. Olson?

Mr. **Olson**. Well, there have been times, if you consider again the production costs and the need of credit by farm and ranch customers, I'm not sure that the commercial banking industry could serve all of those credit needs. So I might agree with the statement with reference to initial entry, but we have certainly needed both the other sources of credit. We have, as Mr. Naylor indicated, we work very closely with the Farmers Home Administration and also with PCA and with the Federal Land Bank people in providing the credit.

So I feel that we need those sources of credit and I would be very surprised if in the future it could be only used as an entry. I think that we're going to have to work closely together and we'll continue to do so in the future.

Senator **Jepsen**. Do you say that you feel that there should be some sort of a hedging mechanism, or at least some available service, in the event the private banks can't provide—in fact, you don't feel they can collectively provide for all the credit that may be required?

Mr. **Olson**. I think that's correct and also, it's going to be highly dependent on the economic conditions of agriculture. That's where we have used the Farmers Home Administration, where it has been used by so many, and also PCA, to some degree.

Senator **Jepsen**. Do you think that the rank and file of your membership feels the same way? I'm not questioning your statement, reflecting the suggestions of your membership, but whenever we get into farm credit legislation the banks seem to feel that maybe the farm credit folks aren't necessary.

Mr. **Olson**. Well, I think that that would not necessarily be the case. I think that the questions of Mr. Irwin earlier with reference to the Farm Credit System, I think that what we have always wanted to make sure is that we operated on equal terms. We always felt that there might have been times in the past where the Farm Credit System, because of their status, may have been able to provide credit at a lower rate of interest. All we want to do is to be able to compete with them on equal terms.

Senator JEPSEN. All right. I don't want to open that up at this hearing because I think Mr. Irwin said that he wants to keep his status. I think I remember that. [Laughter.]

Anyway, they both provide credit to farmers. I have a farm background, born and reared on a farm, as were all my family—my grandfather, father, and my brothers. My brothers now have our family farms. I have never seen a farmer have too much credit available and rarely accessible credit.

I do remember as a young lad, before I understood some of the terminology or some of the processes that are going on, how proud I was to see my dad contract for cattle and then shake hands and say, "Call my banker, he'll take care of it." I didn't realize, until I was 5 or 6, or perhaps 10 years later, that he had about three times that much in hard deposit securities in that bank for the credit that he got.

I thought, boy, everybody really is working together here and my dad's word is good, that's why, he's getting all this credit. I found that wasn't quite how the business world worked.

But in any event, I don't say that critically; just as a kind of an observation.

You know, according to the Department of Agriculture, and this is my last question, Senator, foreign buyers have acquired 600,000 acres of U.S. farmland in 1982. Foreigners currently hold partial or whole interest in 13½ million acres of U.S. agricultural land. In your judgment, and I'd just like a quick comment from each of the panel members before I turn this over to Senator Abdnor, in your judgment, is there any reason to be concerned about this trend? Should we be?

Mr. DUNCAN. Mr. Chairman, I am not concerned about the trend at the current time. It represents a very small proportion of investment in U.S. farmland. Most, by far, the vast majority of U.S. farmland is purchased by farm families. Morever, in an international context, the United States invests far more abroad than other countries invest in the United States.

Mr. IRWIN. Well, of course, the Federal Land Banks cannot finance foreign individuals, to begin with.

Senator JEPSEN. Most of them pay cash, don't they? [Laughter.]

Mr. IRWIN. We would not be involved directly in this, I guess. But I would think that that's a phenomenon that is primarily related to safety of assets. Foreign people wanting to come here because of political risk to their wealth in their country or to take advantage of a very inflationary environment and a lot of capital appreciation opportunities that we had in the 1970's. It's true that we had a lot of nonfarm interest in the United States at that same time also.

Senator JEPSEN. In spite of the problems we have in this country—and we have them—it is still looked to as one of the most, if not "the" safest haven for providing that nest egg or investment to people all around the world.

Mr. IRWIN. Yes.

Senator JEPSEN. That's an actual fact. Some of the supercritics of our system in this country, along with other things, might well take note of that.

Mr. Olson.

Mr. OLSON. I am, likewise, and I think our industry is not concerned about that entry. I think that what we have learned is that our farmers and our ranchers are the most productive people in the world and that we can compete with foreigners or corporation farming. It is not of great concern to us, so that's how I think we feel about that.

Senator JEPSEN. Senator Abdnor.

Senator ABDNOR. Thank you, Mr. Chairman. First, I'd like to apologize for being so late. I had a group of constituents that had a real problem; I guess we politicians give priority to our constituents. I hated to miss any part of this because your roles are so important to the answers we're seeking as to the direction in which agriculture ought to be going.

One thing that went through my mind, I remember 1½ or 2 years ago when we were starting these hearings. We were talking about net income and debt in relation to income and where we were in real dollars. I remember something now. I think I'm correct in saying that we have a net income being projected of around $20 to $21 billion and I think the interest payments on the part of farm debts right now take up almost $19 billion. I don't think I'm very wrong on that, am I, Mr. Duncan?

Mr. DUNCAN. No. I think you're very close to being correct.

Senator ABDNOR. That's quite a dilemma right there to begin with. Something is going to have to happen. Interest rates are still going to have to drop considerably or we're going to have to find some increase in income. I just can't get a very rosy picture out of that. What percent of the farmers have borrowed up to the limit of what a lending institution would allow? Didn't you say that probably a majority of them?

Well, I know we have this group of two-thirds of the farmers of this country. I have heard somewhere, they make more money working off the farm than they do on the farm. I'm talking about the kind you've got out in Nebraska and South Dakota.

Where's Lisco?

Mr. OLSON. Lisco is in western Nebraska, in the panhandle, near Scottsbluff, sir.

Senator ABDNOR. I thought it was. I'm an old cornhusker. [Laughter.]

I don't remember Lisco, but you haven't heard of Kennebec, either, where I come from in South Dakota. [Laughter.]

But in Nebraska, you have no concern about the farmers borrowing almost up to their full extent?

Mr. OLSON. Senator, we are certainly concerned. I think that Mr. Duncan's prepared statement would indicate that maybe 10 to 12 percent of the farmers have serious problems. I was asked the same question yesterday. I think that that will vary depending upon the area. But I really feel that probably we have more than 10 to 12 percent of customers that have serious problems. And relative to recent examinations of our committee yesterday that met and, incidentally, we had two from Iowa there, Senator, but we talked about this very issue. And as a result of recent examinations, many more classified loans depending upon the seriousness of the loan, whether it's substandard or just one that's on the watch list. But we see that the trend is obviously increasing. It's difficult to answer percentagewise, but I would say that when you pose the question, are they at their limit, many of them are at their limit if you want to utilize the cash flow as determining whether they can service their loans. If it's cash flow, that's what we do.

And, of course, as was indicated earlier, many times the customer was able to borrow based upon his equities and his net worth. But today, we look at cash flows as the ability to service and if the cash flow is not positive or is not sufficient enough to service debt, those loans are not being made. And I think that this is being practiced by the Farm Credit Administration and Federal Land Bank, FHA, and other agencies.

Senator ABDNOR. Well, for years, equity carried these farmers. This is nothing new, being caught in a squeeze. Equity has kept them eligible for borrowing all these years, hasn't it? In many cases, the lending institutions have pretty well gone about as far as they can on that, haven't they? I mean, farmers no longer have equity to fall back on.

Oh, there are those that do. I know that. But I'm talking about the rank and file.

You were talking, Mr. Duncan, about when the recovery keeps going and picks up. I'm sure it's bound to help, but I remember some of my better years in farming were years when the overall economy wasn't that good. And some of my poorer years were when others all over the country were doing very well.

Do you see a great pick-up? I'm just wondering. I don't mean to be full of doom and gloom, but even though the recovery moves ahead, how much of an impact is that going to have on farm prices? It's great to say that we're going to eat our way out of this. But when 40 percent of what we produce has to be bound for markets outside of this country, it's hard to get excited about this great recovery.

Mr. DUNCAN. Senator Abdnor, we do have some difficult problems in agriculture, even as we move into a period of economic recovery in that sector. And those problems have changed in nature as the sector has become more dependent on export markets as a home for its products.

We will be able to build increased export markets with greater difficulty in the future, at least in the next few years, than we did during the very rosy days of the 1970's, in part because of economic difficulties in other parts of the world, credit problems elsewhere, the high value of the dollar. But also because other countries have put in place productive capacity that now competes with U.S. production. And let me stress a point that is a difficult dilemma for farmers.

I understand that farmers like to be able to have a price guarantee that covers both at least variable costs and hopefully, variable and fixed costs, as Mr. Olson has indicated. However, the dilemma has been that this price floor has been high enough in the United States to put an umbrella over less efficient areas of the world and those areas, in turn, then have come in to produce products to compete with American farmers.

And while I agree that American farmers are the most efficient in the world and the brightest and the hardest working, they also are in danger in some instances of pricing their product out of world markets.

Senator ABDNOR. Yet that price isn't so great that these farmers are doing all that well in this country. Maybe it's just like the steel industry. Our lowest prices are still higher, I guess, than what other countries of the world can produce steel for. The worst problem for agriculture is that some of those countries are cutting it below their cost of production. In the European Community they've got higher price supports and umbrellas than we have. But somehow they turn around and are able to dump it on the market. Is there all the credit we need for farm exports if we do find sales? Has this country got the necessary ability and capacity for loans?

This is a pretty competitive market. One of the real answers is to find some place to sell this grain. But I've been led to believe that we've got some real competition because of interest rates and everything else.

Is that true?

Mr. DUCAN. Senator Abdnor, in my prepared statement, I have argued that it is very important that we increase the amount of credit available and public credit available for farm export development, direct lending, direct credit extension, credit guarantees, and intermediate types of credit that would be available to build infrastructure and economic development in those countries to add to an effective market demand for U.S. farm products.

It seems to me that this is one of the highest payoff areas for Government credit in agriculture over the next decade, that of targeting the credit toward facilitating the increase in farm export sales.

Senator ABDNOR. Well, do you think we can compete with these other countries on the interest terms they're giving? I mean, there is some of that going on now, isn't there? Our interest rates in some cases I think are higher than France's, for instance.

Mr. DUNCAN. Senator, I have some problems, as an economist, with the idea of entering into a full-scale subsidy war with other countries. That tends to be a very difficult situation.

Let me point out that farm subsidies in the Common Market are costing Common Market countries dearly. And it seems to me that what is necessary is for this country to quietly and effectively indicate our position on subsidization to our trading partner countries and do so in a firm and effective manner and in a continuing manner.

Changes in trade policy, vis-a-vis, our trading partner in our competitor countries, come only after a considerable period of time. The solutions aren't easy, nor are they quickly gained. We must simply recognize that we are in a new ball game, as it were, where we will face greater competition in export markets. We need to be particularly vigilant. I agree that the marketplace is as fair and equitable as possible. But it will not be able to, we will not be able to resolve all of these problems to our satisfaction quickly.

Senator Abdnor. Well, then, how do we meet that? I guess that's my dilemma. What do we do, just let them go on doing that? They haven't showed any indication of letting up on more or less a price war. They have lower prices and they have lower interest. I guess the American dollar, being what it is, is probably the biggest problem that we have in competition. But then you throw these other factors in until they're willing to back off a little. But everything that I've read and seen about our GATT talks and the other exchanges is not good.

I'm just wondering how long can we go if we keep on losing markets?

Now we have cut back in the PIK program this year, but what we've cut back is not what the real picture is in world terms because the other countries have increased. So we're not winning anything there. We just can't let them increase their percentage of the foreign market. Somehow, we've got to compete with them, don't we?

Mr. Duncan. Senator Abdnor, I think that we can compete more effectively than we have by use of export credit, by permitting market prices, world market prices to dictate price signals to our farmers and in the face of income problems as a result of that or to cushion our producers against down-side price risk from unforeseen circumstances in world markets, some type of income protection, perhaps insurance programs, things of that nature would be appropriate.

Certainly all these problems are much more readily resolved, or progress toward the resolution comes much easier in the context of a growing world economy.

Hence, I point out once again the interlinkage of the agricultural sector and food and fiber policy with broader economic policies here and abroad and the important stake the U.S. farmers and ranchers have in a growing economy in the context of price stability.

Senator Abdnor. Do you agree with that, Mr. Irwin?

Mr. Irwin. I don't think I have any quarrel with that. I might just focus on one aspect and then tie it back to something that you said earlier.

To a certain extent, what we're dealing with is a cyclical problem and it's a problem of recession throughout the world affecting demand and of the U.S. economy being in a different phase than the rest of the world.

One of the primary consequences is in terms of foreign currencies—our grains are pretty expensive. And we would hope if we got some additional stability in the world and we get some recovery, the exchange rates would move a little bit in our favor. This is the biggest single factor in making us more competitive.

Of course, that means that as long as we are living in an era when there are economic cycles in different economies, periodically the ag economy is going to have the same problem. We depend on exports and our things get expensive in terms of other currencies at times.

Senator Abdnor. A year and a half ago, Mr. Schuh from Minnesota was here and made a big issue of this.

Mr. **Irwin**. That's just one of the factors that a new farm bill has to consider, is how much of that and how to deal with it?

Senator **Abdnor**. Mr. Olson was talking about things that we need in the farm program. Now, I'm scared to death, because we have a farm program, this year, that Congress is going to put $30 billion into. They're not going to let us do that very much longer; not when they're cutting other areas of the budget. So that's what I'm trying to figure out.

I could write a great farm program if we could put the money behind it. But trying to talk the Congress out of it would be something. A few years ago we were putting $4 to $5 billion, at the most, into some of these programs, and now we're up to $12 billion—or whatever it is—in PIK.

So, as you all know, that isn't going to last. We've got to try to find something to take its place.

Mr. **Irwin**. I agree. We are concerned about the cost of the farm program. That's again one of the reasons that we met yesterday. And I think we fully concur with Mr. Duncan's position that the future of farm exports is going to be the solution to our problem.

However, I think you've already mentioned and alluded to the fact that what we're looking at is almost a crisis situation, to some degree, with a lot of our farmers. If we do not see some improvement, aside from the PIK program in the balance of 1983 and then in 1984, we might be talking about a lot more liquidations.

So the policy that we're recommending, again we would hope would be short-term. But we think that maybe it may be necessary because if you can imagine, with many more foreclosures, pretty soon you're going to get more land on the market.

And Senator Jepsen, if you want to talk about what has happened to land values in your State, I would say that, you know, we were talking about $3,800 per acre land values yesterday, say a couple of years ago, and today, that same land may be valued at $2,500 or $2,000 an acre. Maybe it was certainly too high at $3,800, but there's not many farmers that can buy land today if it goes on the market.

So I think that we're looking at, again, a short-term fix here and hopefully permitting time for exports to improve.

Senator **Abdnor**. Thank you, Mr. Chairman.

Senator **Jepsen**. Thank you. Is there anyone on the panel who would like to make a statement for the record before we close this session?

[No response.]

Senator **Jepsen**. I thank you very much.

Senator **Abdnor**. Can I get a real quick question in?

Senator **Jepsen**. Of course, Senator.

Senator **Abdnor**. Maybe Mr. Olson can tell me about the prime rate which is down to 11 to 11½ percent. Out my way our banks are still charging at least 13 to 14 percent on loans and even higher now.

Are we going to see rates coming down to less of a spread there between what the rates are, what they're asking, and what the prime rates are?

Mr. **Olson**. May I just say in defense of the bank in your area, and also in my area, we talk about deregulation and how it has affected, what has it done for my customers. And in my particular area, and I think most banks, set their interest rates based upon their cost of funds.

I think that, yes, the rates are going to come down some more in your particular area. But we were involved in the money market accounts, the super NOW accounts, and the NOW accounts. Those interest rates and the cost of those funds has been very expensive. Deregulation has been part of this.

Senator ABDNOR. Deregulation—I'm getting tired of hearing that. Rural America seems to be getting the wrong end of it.

Mr. OLSON. I think that maybe we have had more deregulation than we need. But to answer your question directly, yes; I think that rates are going to come down more in your community and, hopefully, in my area, too.

Senator JEPSEN. I thank you and I thank the panel for your contributions today. To paraphrase what someone once said about farming and agriculture, "Take away the cities, but keep our farms. We will rebuild our cities. But take away our farms and the grass will grow in the streets of the cities."

You know, this is the first time in 50 years, really, that we have had a full-scale examination of our farm policy. And the Joint Economic Committee has set a series of hearings not only in Washington, but outside of Washington, to prepare not only for the 1985 farm policy, but for a farm policy of the next generation. It's long overdue.

I want to take this moment in time to extend my thanks and that of the Joint Economic Committee to the management and the personnel of the National Public Radio. They have served us, and the Nation very well in covering these important hearings.

I appreciate it.

The committee is recessed.

[Whereupon, at 11:50 a.m., the committee recessed, to reconvene at 9:30 a.m., Friday, July 1, 1983.]

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